

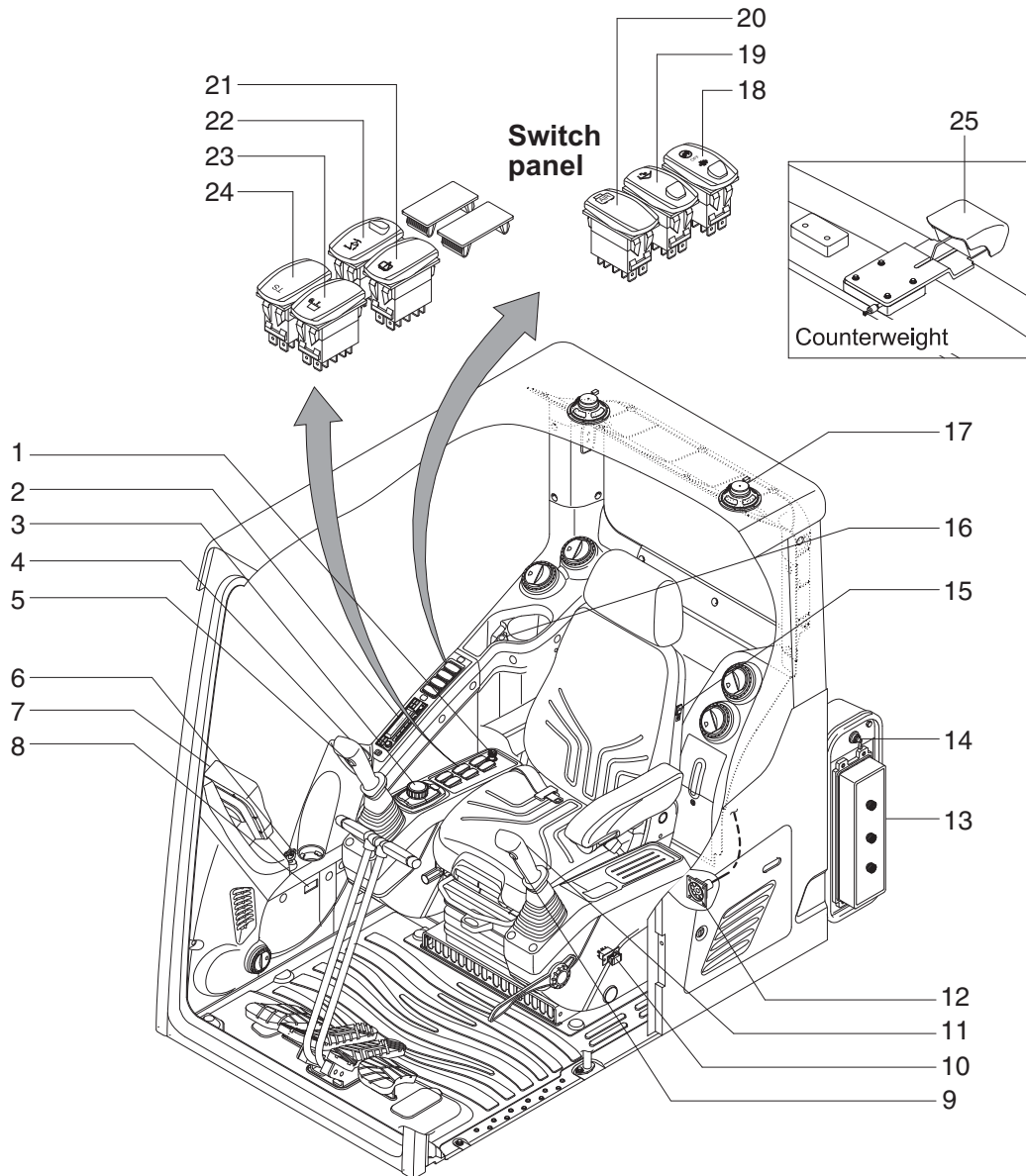
SECTION 4 ELECTRICAL SYSTEM

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SECTION 4 ELECTRICAL SYSTEM

GROUP 1 COMPONENT LOCATION

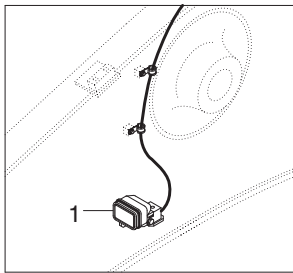
1. LOCATION 1



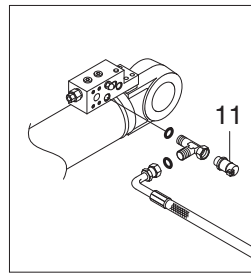
220NL4EL01

- | | | |
|----------------------------|---------------------------------|--------------------------------|
| 1 Cigar lighter | 10 Emergency engine stop switch | 19 Quick clamp switch |
| 2 Radio & USB player | 11 One touch decel switch | 20 Air compressor switch |
| 3 Haptic controller | 12 RS232 & J1939 service socket | 21 Lower wiper & washer switch |
| 4 Horn switch | 13 Fuse & relay box | 22 Boom floating switch |
| 5 Breaker operation switch | 14 Master switch | 23 Swing lock/fine switch |
| 6 Starting switch | 15 Seat heater switch | 24 Travel straight switch |
| 7 Cluster | 16 Power socket | 25 Rear view camera |
| 8 Service meter | 17 Speaker | |
| 9 Power max switch | 18 SCR system cleaning switch | |

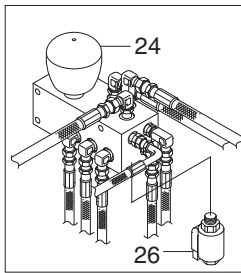
2. LOCATION 2



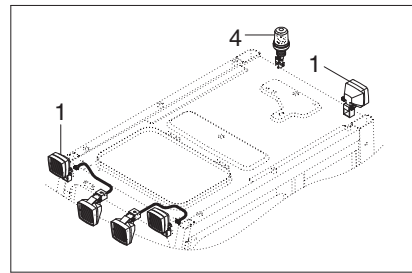
BOOM



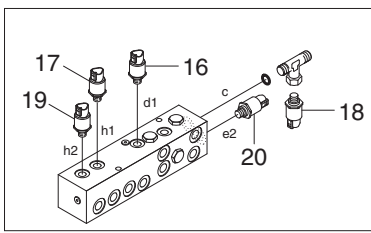
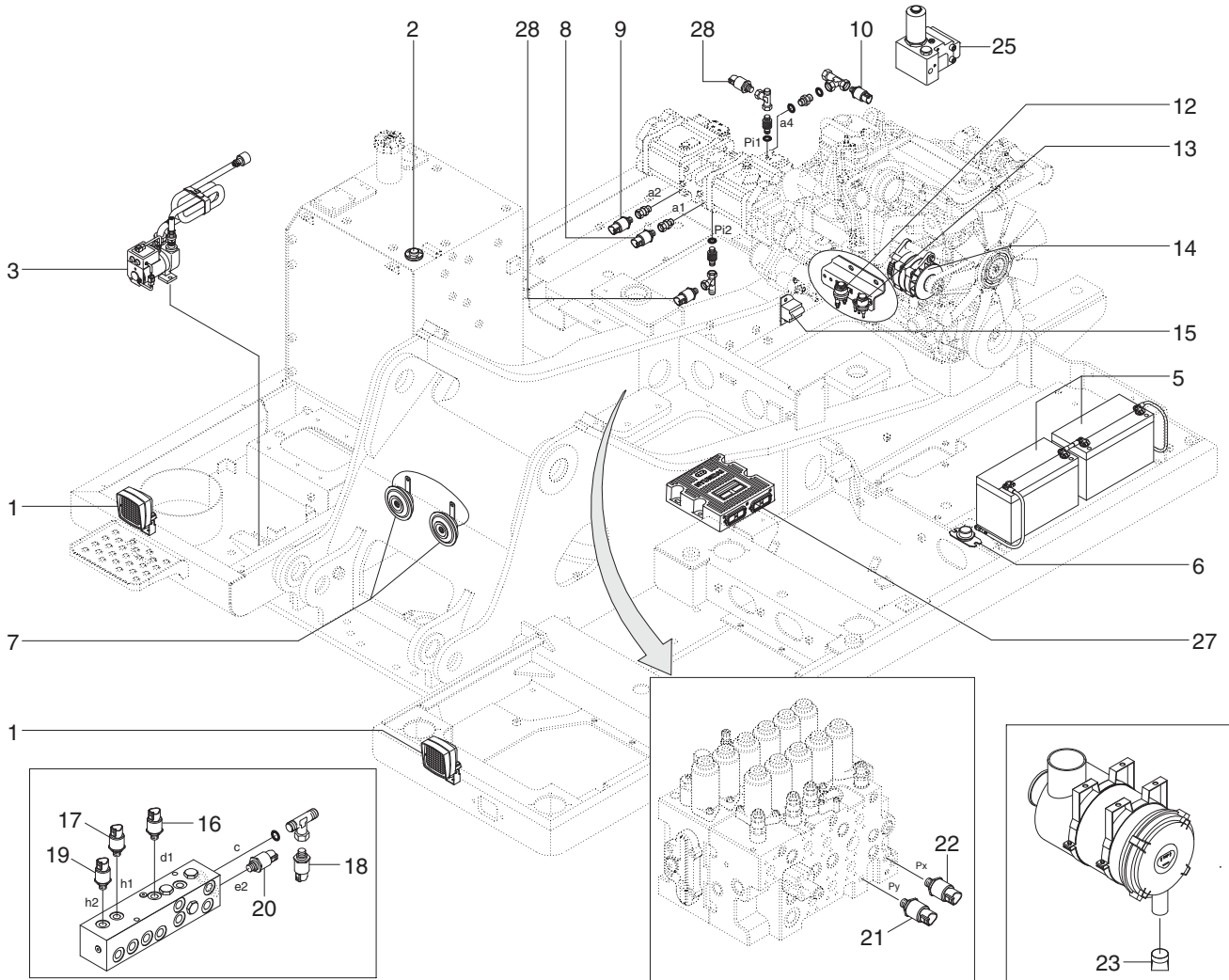
BOOM SAFETY VALVE



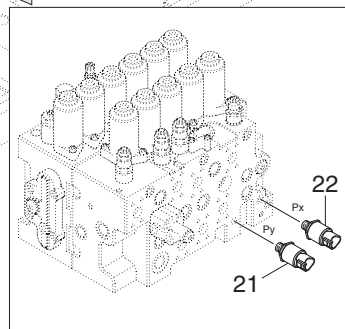
SOLENOID VALVE



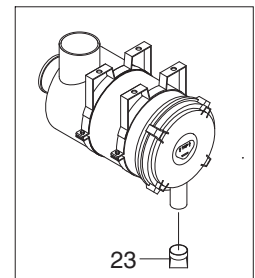
CAB



SHUTTLE BLOCK



MAIN CONTROL VALVE



AIR CLEANER

220NL4EL02

- | | | |
|-------------------------|----------------------------------|---------------------------------|
| 1 Lamp | 11 Overload pressure sensor | 21 Attach pressure sensor |
| 2 Fuel sender | 12 Start relay | 22 Travel pressure sensor |
| 3 Fuel filler pump | 13 Heater relay | 23 Air cleaner sensor |
| 4 Beacon lamp | 14 Alternator | 24 5 cartridge valve |
| 5 Battery | 15 Travel alarm buzzer | 25 Pump EPPR valve |
| 6 Battery relay | 16 Arm/Bucket in pressure sensor | 26 Boom priority EPPR valve |
| 7 Horn | 17 Boom up pressure sensor | 27 MCU |
| 8 P1 pressure sensor | 18 Swing pressure sensor | 28 Nega-control pressure sensor |
| 9 P2 pressure sensor | 19 Boom down pressure sensor | |
| 10 EPPR pressure sensor | 20 Arm in pressure sensor | |

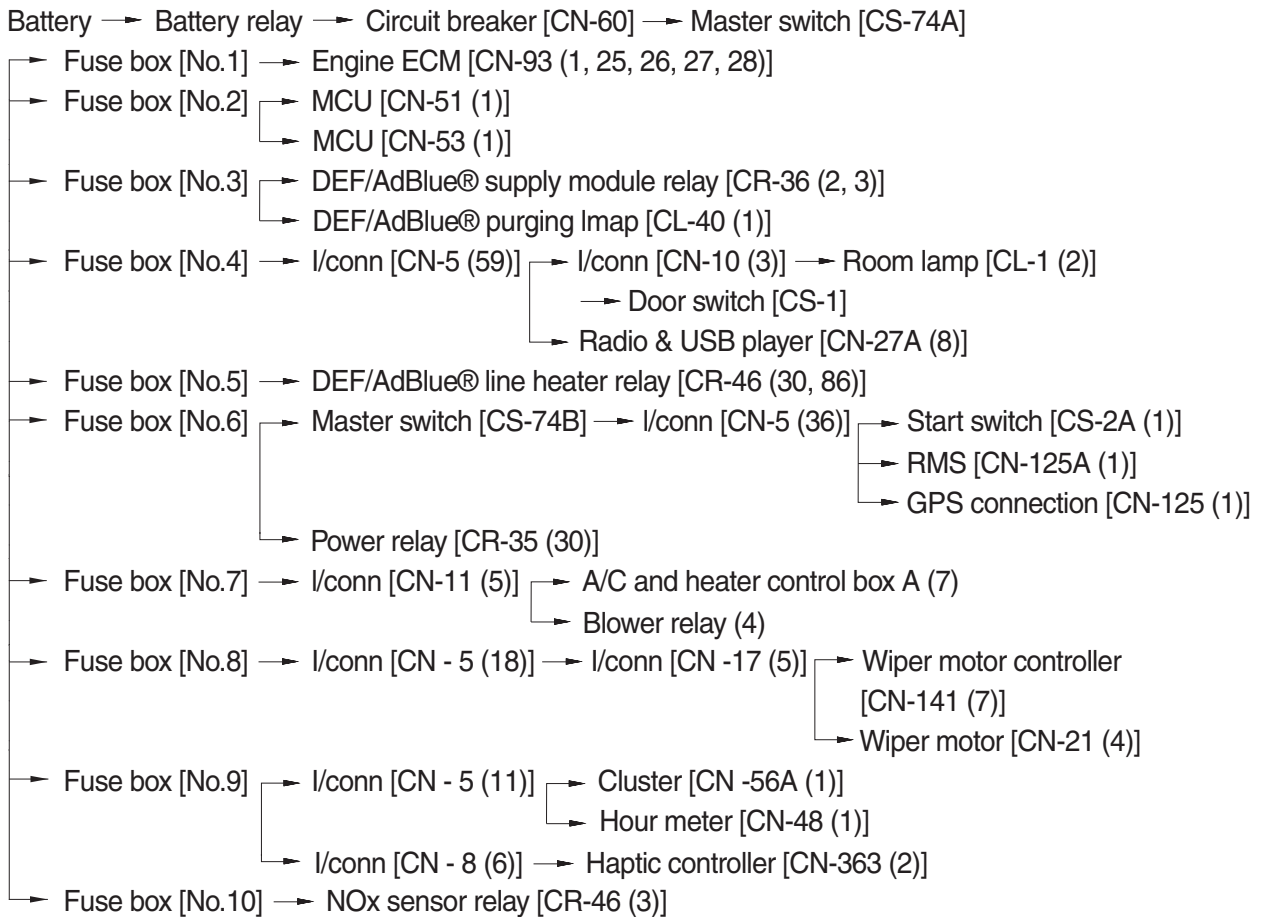
MEMORANDUM

1. POWER CIRCUIT

The negative terminal of battery is grounded to the machine chassis.

When the start switch is in the OFF position, the current flows from the positive battery terminal as shown below.

1) OPERATING FLOW



※ I/conn : Intermediate connector

2) CHECK POINT

Engine	Start switch	Check point	Voltage
OFF	OFF	① - GND (battery 1EA) ② - GND (battery 2EA) ③ - GND (battery relay 2EA) ④ - GND (circuit breaker)	10~12.5V 20~25V 20~25V 20~25V

※ GND : Ground

3. CHARGING CIRCUIT

When the starter is activated and the engine is started, the operator releases the key switch to the ON position.

Charging current generated by operating alternator flows into the battery through the battery relay [CR-1].

The current also flows from alternator to each electrical component and controller through the fuse box.

1) OPERATING FLOW

(1) Warning flow

Alternator "L" terminal → I/conn [CN-2 (13)] → MCU alternator level [CN-52 (27)]
 → Cluster charging warning lamp (Via CAN interface)

(2) Charging flow

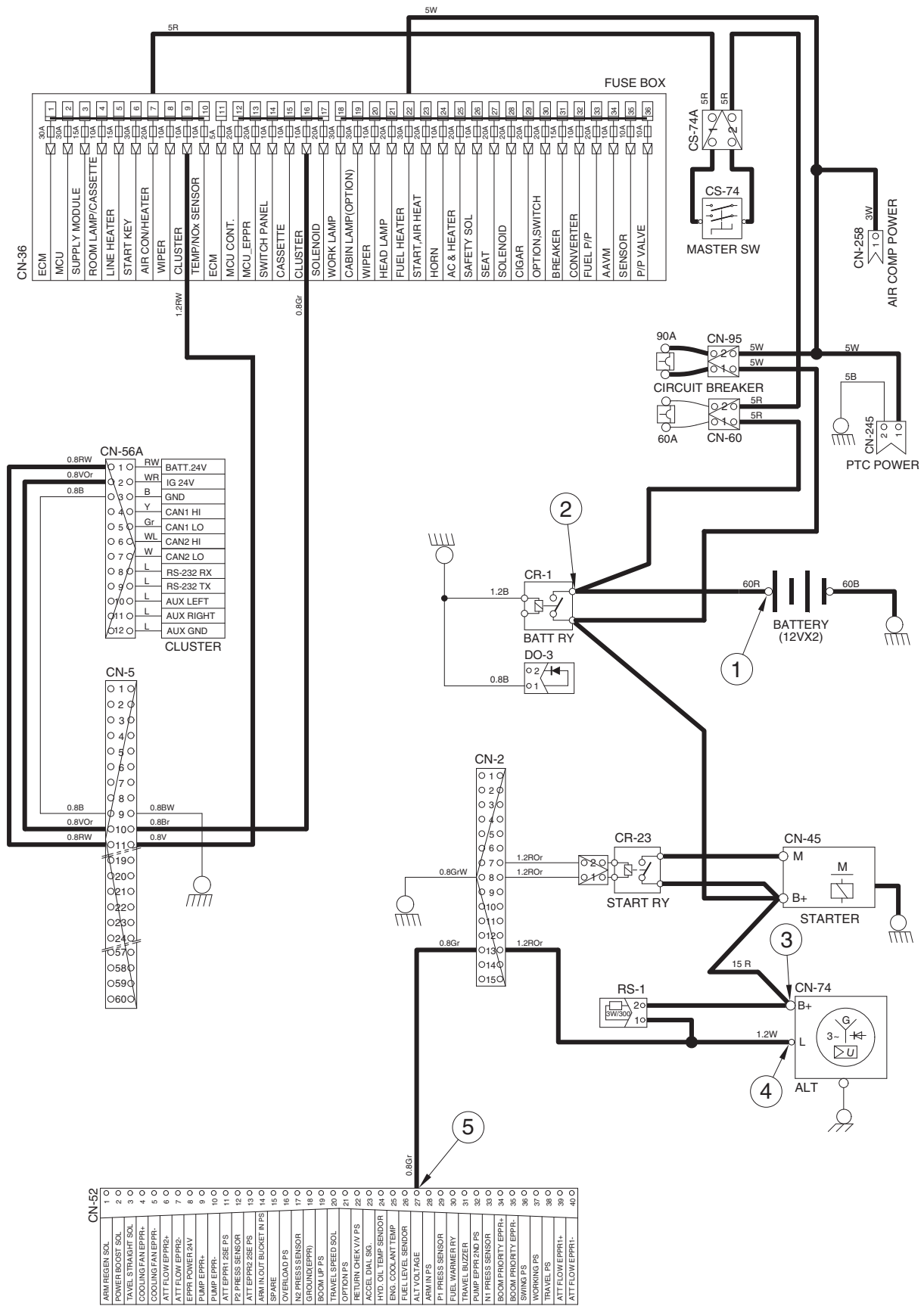
Alternator "B+" terminal → Starter [CN-45(B+)] → Battery relay (M8)
 → Battery(+) terminal
 → Circuit breaker [CN-60] → Master switch [CS-74A]
 → Fuse box
 → Circuit breaker [CN-95] → Fuse box

2) CHECK POINT

Engine	Start switch	Check point	Voltage
Run	ON	① - GND (battery voltage) ② - GND (battery relay) ③ - GND (alternator B ⁺ terminal) ④ - GND (alternator L terminal) ⑤ - GND (MCU)	20~25V

※ GND : Ground

CHARGING CIRCUIT



MCU

220NL4EL07

4. HEAD AND WORK LIGHT CIRCUIT

1) OPERATING FLOW

Fuse box (No.21) → Head light relay [CR-13 (30, 86)]

Fuse box (No.18) → Work light relay [CR-4 (30, 86)]

(1) Head light switch ON

Head light switch ON [CN-376 (13)] → Head light relay [CR-13 (85) → (87)]

→ Head light ON [CL-3 (2), CL-4 (1), CL-24 (2)]

→ I/conn [CN-7 (1)] → Cigar light [CL-2]

→ I/conn [CN-5 (60)] → Radio & USB player illumination ON [CN-27A (9)]

(2) Work light switch ON

Work light switch ON [CN-376 (4)] → Work light relay [CR-4 (85) → (87)]

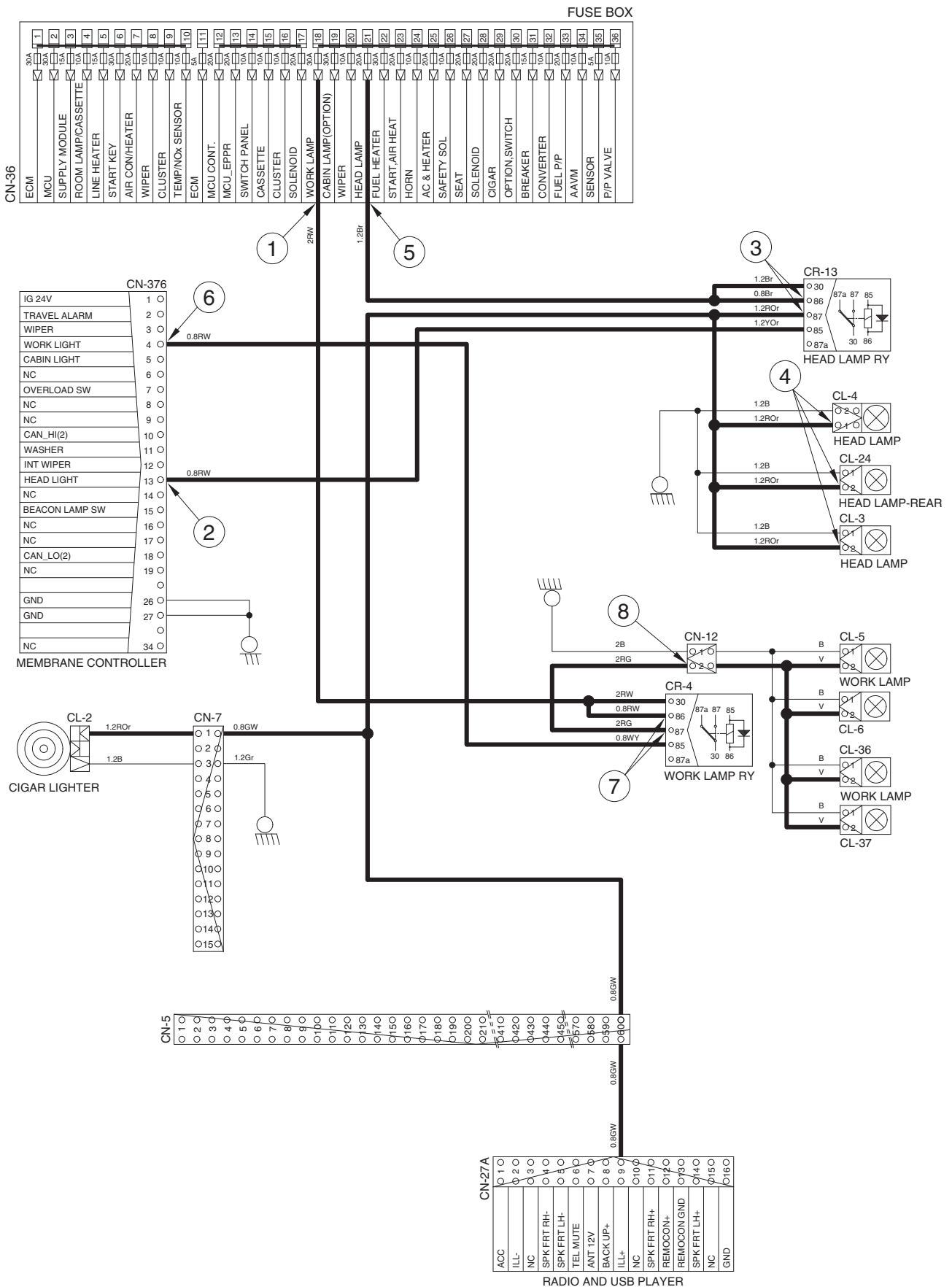
→ I/conn [CN-12 (2)] → Work light ON [CL-5 (2), CL-6 (2), CL-36 (2), CL-37 (2)]

2) CHECK POINT

Engine	Start switch	Check point	Voltage
STOP	ON	① - GND (fuse box) ② - GND (head light switch power output) ③ - GND (head light relay) ④ - GND (head light) ⑤ - GND (fuse box) ⑥ - GND (work light switch power output) ⑦ - GND (work light relay) ⑧ - GND (work light)	20~25V

※ GND : Ground

HEAD AND WORK LIGHT CIRCUIT



5. BEACON LAMP AND CAB LIGHT CIRCUIT

1) OPERATING FLOW

Fuse box (No.30) → Beacon lamp relay [CR-36 (2, 3)]

Fuse box (No.19) → Cab light relay [CR-9 (30, 86)]

(1) Beacon lamp switch ON

Beacon lamp switch ON [CN-376 (15)] → Beacon lamp relay [CR-36 (1)→ (5)]

→ I/conn [CN-5 (50)] → I/conn [CN-10 (10)] → Beacon lamp ON [CL-7]

(2) Cab light switch ON

Cab light switch ON [CN-376 (5)] → Cab lamp relay [CR-9 (85) → (87)]

→ I/conn [CN-5 (34, 38)] → I/conn [CN-10 (11)] → Cab light ON [CL-8 (2)]

→ I/conn [CN-10 (12)] → Cab light ON [CL-9 (2), CL-10 (2)]

2) CHECK POINT

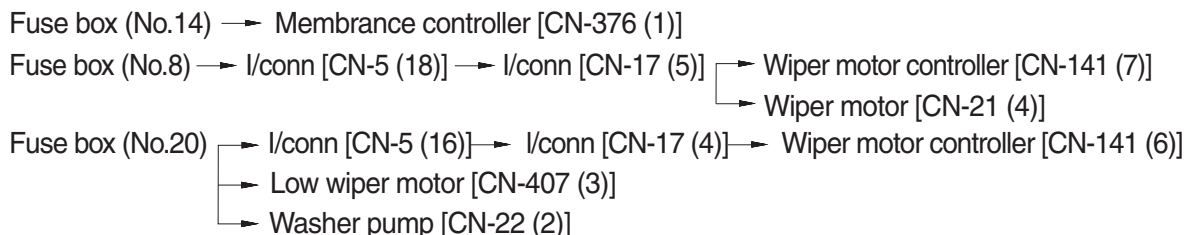
Engine	Start switch	Check point	Voltage
STOP	ON	① - GND (fuse box) ② - GND (beacon lamp relay) ③ - GND (beacon lamp switch power output) ④ - GND (beacon lamp) ⑤ - GND (fuse box) ⑥ - GND (cabin light relay) ⑦ - GND (cab light switch power output) ⑧ - GND (cab light)	20~25V

※ GND : Ground

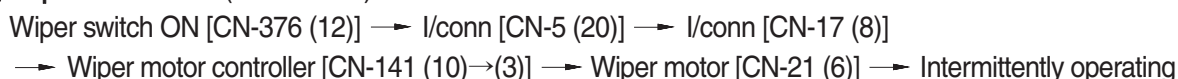
6. WIPER AND WASHER CIRCUIT

1) OPERATING FLOW

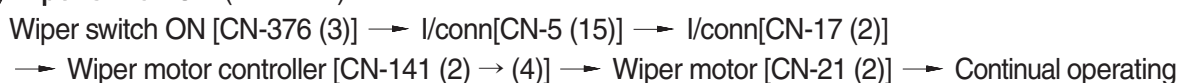
(1) Key switch ON



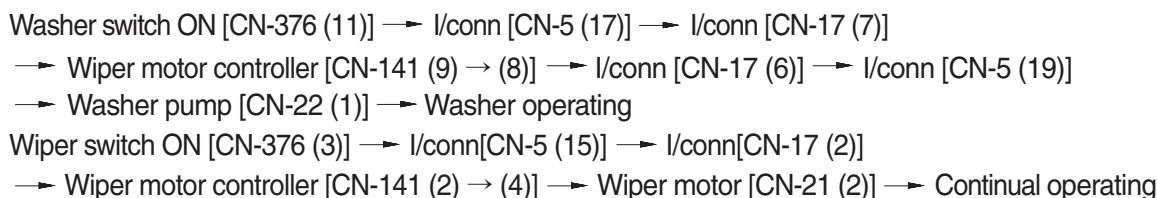
(2) Wiper switch ON (Intermittent)



(3) Wiper switch ON (continual)



(4) Washer switch ON

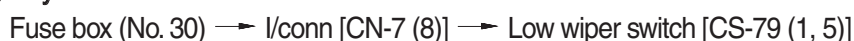


(5) Auto parking (when switch OFF)

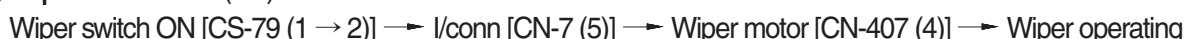


2) OPERATING FLOW (LOW WIPER)

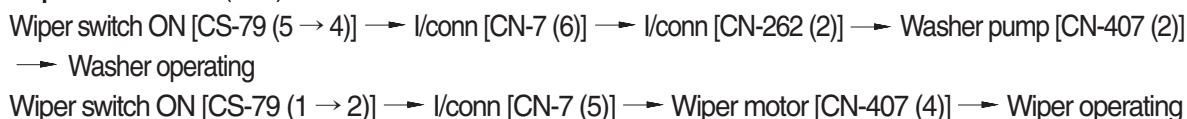
(1) Key switch ON



(2) Wiper switch ON (1st)



(3) Wiper switch ON (2nd)

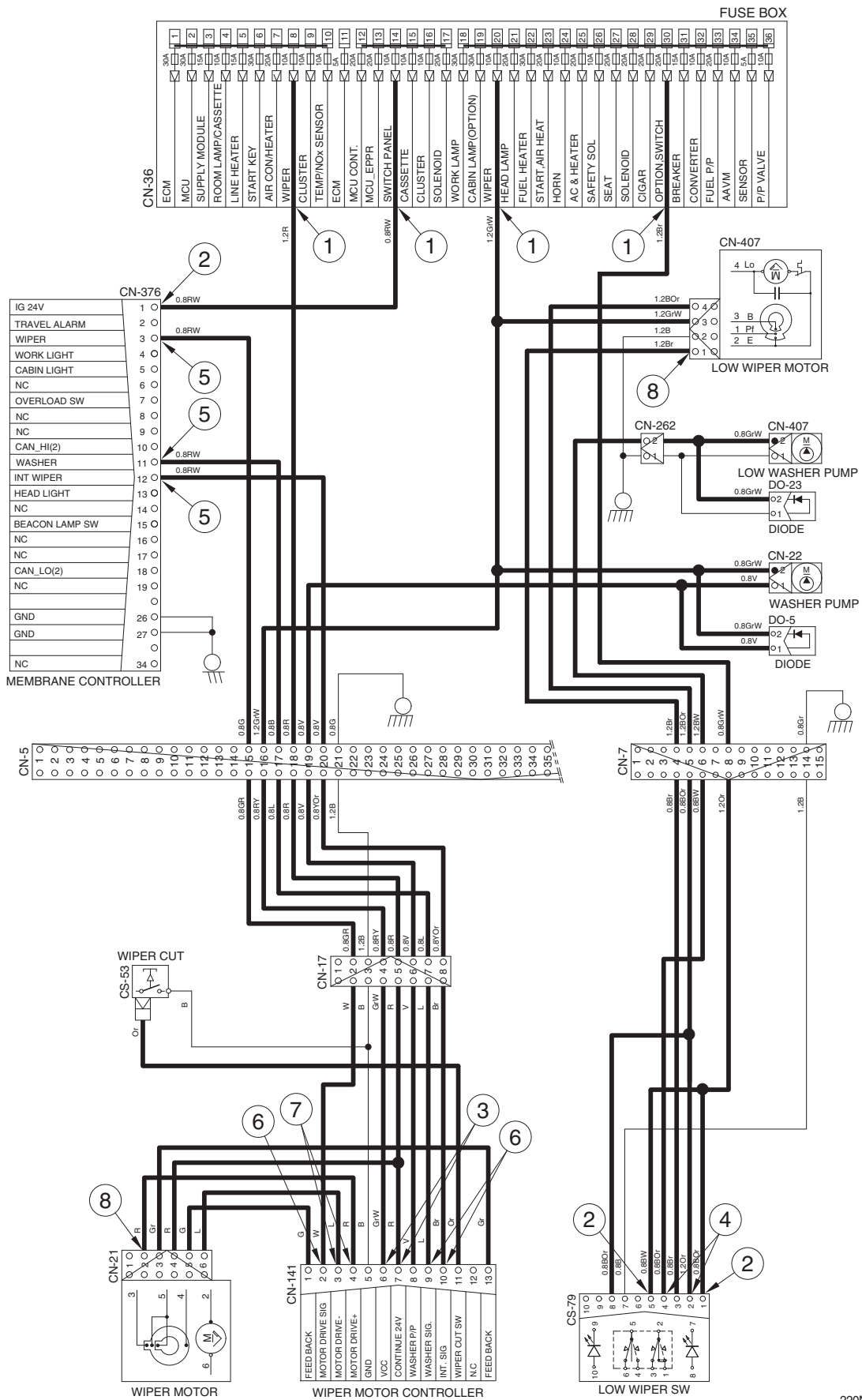


3) CHECK POINT

Engine	Start switch	Check point	Voltage
STOP	ON	① - GND (fuse box)	20~25V
		② - GND (switch power input)	
		③ - GND (wiper power input)	
		④ - GND (switch power input)	
		⑤ - GND (switch power output)	0 ~ 5V
		⑥ - GND (wiper power input)	
		⑦ - GND (wiper power output)	24V
		⑧ - GND (wiper motor)	0 or 24V

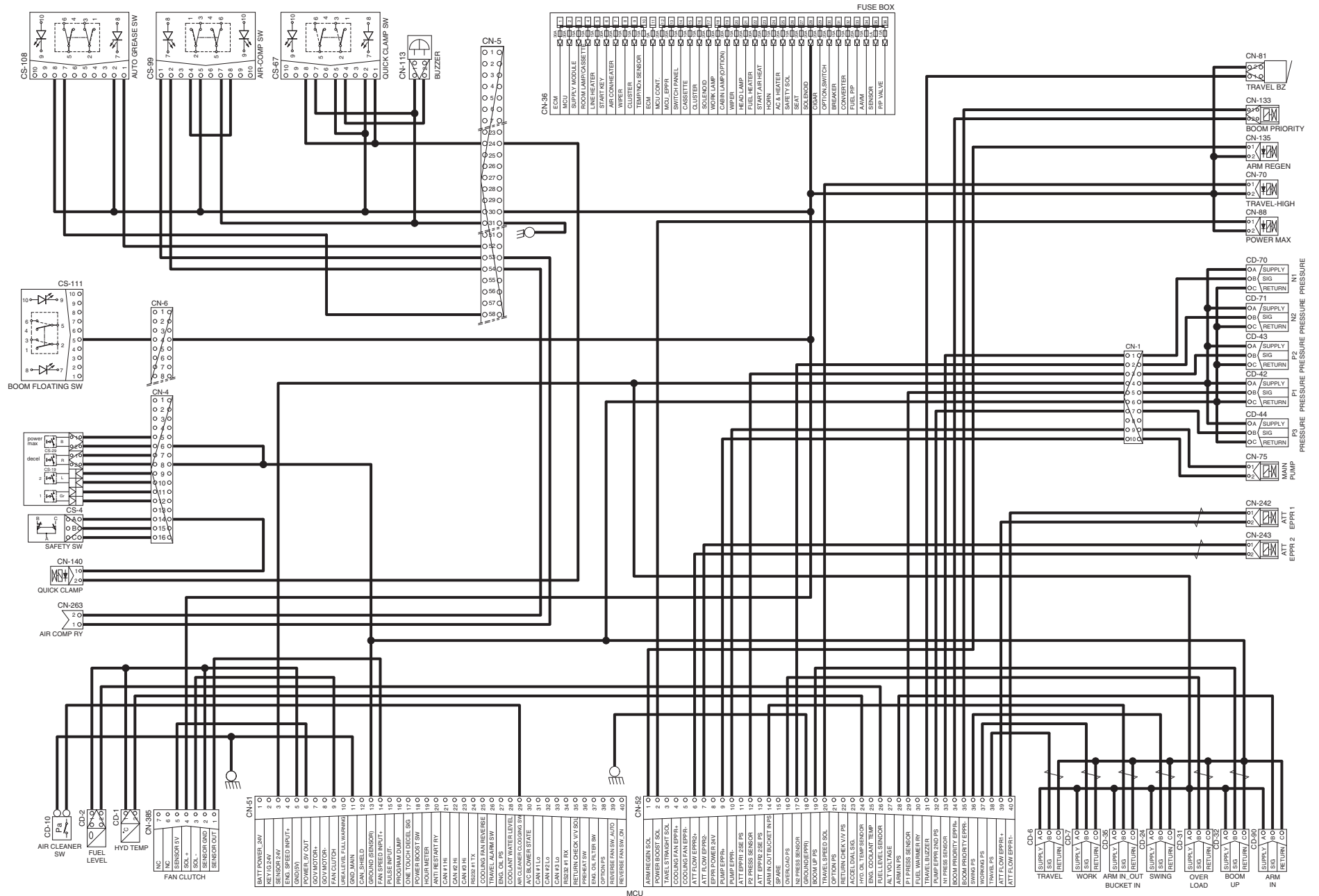
※ GND : Ground

WIPER AND WASHER CIRCUIT

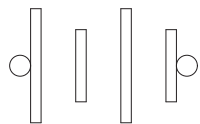
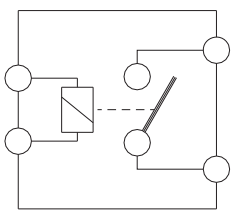
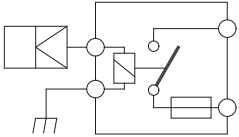
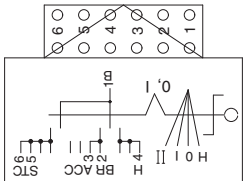
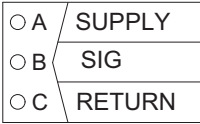
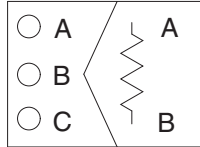


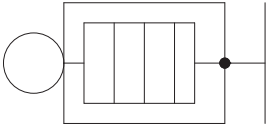
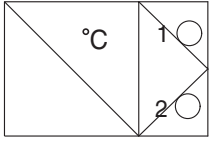
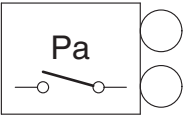
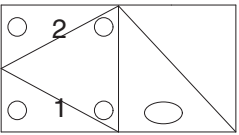
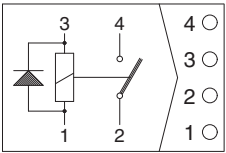
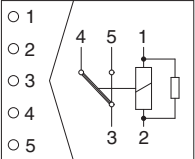
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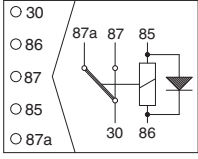
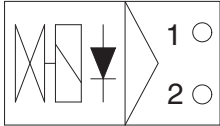

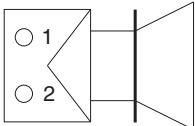
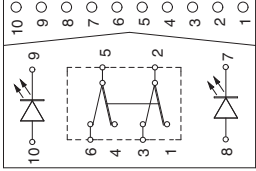
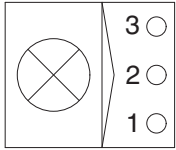
ELECTRIC CIRCUIT FOR HYDRAULIC (1/2)

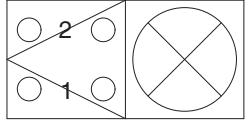
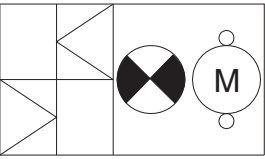
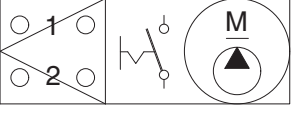
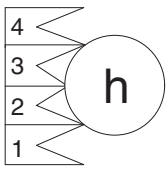
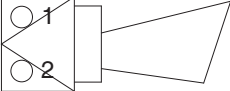
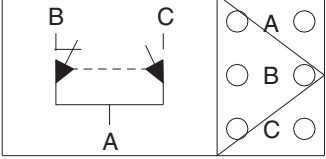


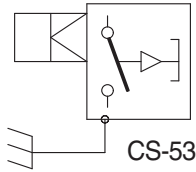
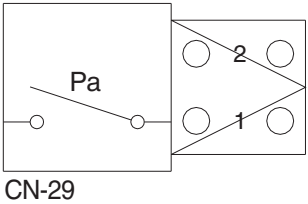
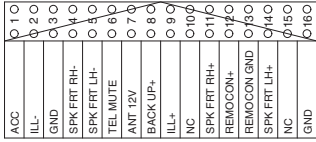
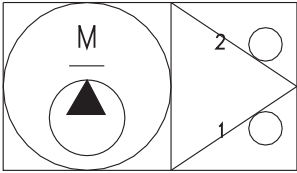
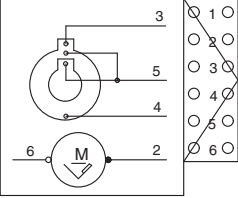
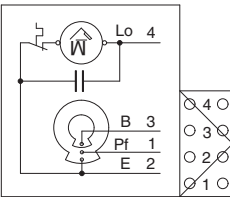
GROUP 3 ELECTRICAL COMPONENT SPECIFICATION

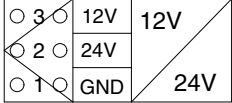
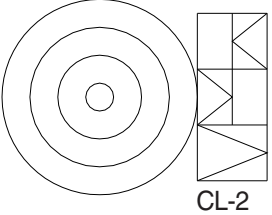
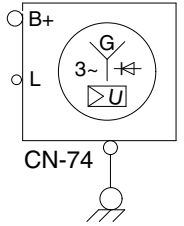

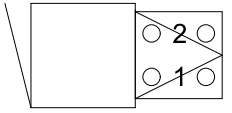
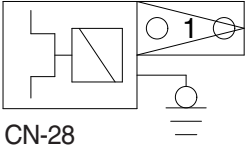
Part name	Symbol	Specifications	Check
Battery		12V × 100Ah (2EA)	※ Check specific gravity 1.280 over : Over charged 1.280 ~ 1.250 : Normal 1.250 below : Recharging
Battery relay	 <p style="text-align: center;">CR-1</p>	Rated load : 24V 100A (continuity) 1000A (30seconds)	※ Check coil resistance(M4 to M4) Normal : About 50 Ω ※ Check contact Normal : ∞ Ω
Glow plug relay	 <p style="text-align: center;">CR-24</p>	24V 200A	※ Check contact Normal : 0.942 Ω (For terminal 1-GND)
Start key	 <p style="text-align: center;">CS-2A</p>	B-BR : 24V 1A B-ACC : 24V 10A B-ST : 24V 40A	※ Check contact OFF : ∞ Ω (for each terminal) ON : 0 Ω (for terminal 1-3 and 1-2) START : 0 Ω (for terminal 1-6)
Pressure sensor	 <p style="text-align: center;"> CD-6 CD-7 CD-16 CD-24 CD-31 CD-32 CD-35 CD-42 CD-43 CD-44 CD-69 CD-70 CD-71 CD-85 CD-90 CD-124 </p>	8~30V	※ Check contact Normal : 0.1 Ω
Resistor	 <p style="text-align: center;">CN-173 CN-174</p>	4W	※ Check resistance A-B : 120 Ω

Part name	Symbol	Specifications	Check
Glow plug	 CN-80	24V 200A	※ Check resistance 0.25~0.12 Ω
Temperature sensor (hydraulic)	 CD-1	-	※ Check resistance 50°C : 804 Ω 80°C : 310 Ω 100°C : 180 Ω
Air cleaner pressure switch	 CD-10	N.O TYPE	※ Check contact High level : ∞ Ω Low level : 0 Ω
Fuel level sender	 CD-2	-	※ Check resistance Full : 50 Ω 6/12 : 350 Ω 11/12 : 100 Ω 5/12 : 400 Ω 10/12 : 150 Ω 4/12 : 450 Ω 9/12 : 200 Ω 3/12 : 500 Ω 8/12 : 250 Ω 2/12 : 550 Ω 7/12 : 300 Ω 1/12 : 600 Ω Empty warning : 700 Ω
Relay (air con blower)		24V 20A	※ Check resistance Normal : About 200 Ω (for terminal 1-3) ∞ Ω (for terminal 2-4)
Relay	 CR-2 CR-5 CR-36 CR-39 CR-45 CR-46 CR-50 CR-51	24V 16A	※ Check resistance Normal : About 160 Ω (for terminal 1-2) 0 Ω (for terminal 3-4) ∞ Ω (for terminal 3-5)

Part name	Symbol	Specifications	Check
Relay	 <p>CR-4 CR-7 CR-9 CR-13 CR-35 CR-46 CR-52</p>	24V 16A	※ Check resistance Normal : About 160 Ω (for terminal 85-86) 0 Ω (for terminal 30-87a) ∞ Ω (for terminal 30-87)
Solenoid valve	 <p>CN-66 CN-68 CN-70 CN-88 CN-135 CN-140 CN-149 CN-237 CN-262A CN-262B CN-367 CN-368 CN-369 CN-370 CN-419 CN-420 CN-421</p>	24V 1A	※ Check resistance Normal : 15~25 Ω (for terminal 1-2)
EPPR valve	 <p>CN-75 CN-133 CN-242 CN-243 CN-309 CN-310 CN-365 CN-366 CN-378 CN-384</p>	700mA	※ Check resistance Normal : 15~25 Ω (for terminal 1-2)
Speaker	 <p>CN-23(LH) CN-24(RH)</p>	20W	※ Check resistance Normal : A few Ω
Switch (locking type)	 <p>CS-52 CS-67 CS-83 CS-99 CS-107 CS-108 CS-111</p>	24V 1.5A	※ Check contact Normal ON : 0 Ω (for terminal 2-3, 5-6) ∞ Ω (for terminal 1-2, 4-5) OFF : ∞ Ω (for terminal 2-3, 5-6) 0 Ω (for terminal 1-2, 4-5)
Room lamp	 <p>CL-1</p>	24V 10W	※ Check disconnection Normal : 1.0 Ω ON : 0 Ω (For terminal 1-2) ∞ Ω (For terminal 1-3) OFF : ∞ Ω (For terminal 1-2) 0 Ω (For terminal 1-3)

Part name	Symbol	Specifications	Check
Head lamp, Work lamp, Cab lamp	 <p>CL-3 CL-4 CL-5 CL-6 CL-8 CL-9 CL-10 CL-24 CL-36 CL-37</p>	24V 65W (H3 Type)	※ Check disconnection Normal : 1.2 Ω
Beacon lamp	 <p>CL-7</p>	21V 70W (H1 Type)	※ Check disconnection Normal : A few Ω
Fuel filler pump	 <p>CN-61</p>	24V 10A 35 l /min	※ Check resistance Normal : 1.0 Ω
Hour meter	 <p>CN-48</p>	16~32V	※ Check operation Supply power(24V) to terminal No.2 and connect terminal No.1 and ground
Horn	 <p>CN-20 CN-25</p>	DC22~28V 2A	※ Check operation Supply power(24V) to each terminal and connect ground.
Safety switch	 <p>CS-4</p>	24V 15A (N.C TYPE)	※ Check contact Normal : 0 Ω (for terminal A-B) ∞ Ω (for terminal A-C) Operating : ∞ Ω (for terminal A-B) 0 Ω (for terminal A-C)

Part name	Symbol	Specifications	Check
Wiper cut switch	 <p>CS-53</p>	24V (N.O TYPE)	※ Check contact Normal : 0 Ω (one pin to ground)
Receiver dryer	 <p>CN-29</p>	24V 2.5A	※ Check contact Normal : ∞ Ω
Radio & USB player	 <p>CN-27A</p>	24V 2A	※ Check voltage 20~25V (for terminal 1-3, 3-8)
Washer pump	 <p>CN-22 CN-408</p>	24V 3.8A	※ Check contact Normal : 10.7 Ω (for terminal 1-2)
Wiper motor	 <p>CN-21</p>	24V 2A	※ Check disconnection Normal : 7 Ω (for terminal 2-6)
Low wiper motor	 <p>CN-407</p>	24V	-

Part name	Symbol	Specifications	Check
DC/DC Converter	 <p>CN-138</p>	12V 3A	※ Check voltage 24V (for terminal 1-2) 12V (for terminal 1-3)
Cigar lighter	 <p>CL-2</p>	24V 5A 1.4W	※ Check coil resistance Normal : About 1M Ω ※ Check contact Normal : ∞ Ω Operating time : 5~15sec
Alternator	 <p>CN-74</p>	Denso 24V 95A	※ Check contact Normal : 0 Ω (for terminal B ⁺ -L) Normal : 24~27.5V
Starter	 <p>CN-45</p>	24V 4.8kW	※ Check contact Normal : 0.1 Ω
Travel alarm	 <p>CN-81</p>	24V 0.5A	※ Check contact Normal : 5.2 Ω
Air conditioner compressor	 <p>CN-28</p>	24V 79W	※ Check contact Normal : 13.4 Ω

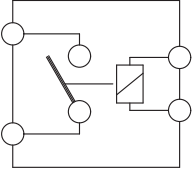
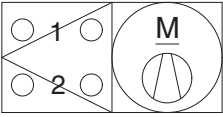
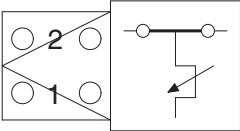
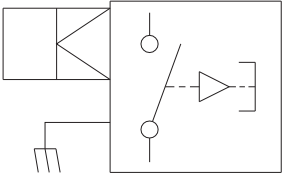
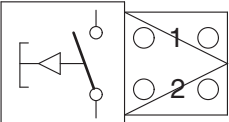
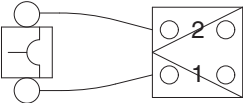
DTC		Diagnostic Criteria	Application		
HCESPN	FMI		G	C	W
530	0	10 seconds continuous, Travel Forward Press. Sensor Measurement Voltage > 5.2V			●
	1	10 seconds continuous, 0.3V ≤ Travel Forward Press. Sensor Measurement Voltage < 0.8V			●
	4	10 seconds continuous, Travel Forward Press. Sensor Measurement Voltage < 0.3V			●
	(Results / Symptoms) 1. Monitor – Travel Forward Press. display failure 2. Control Function – Driving interoperability power control operation failure (Checking list) 1. CD-73 (#B) – CN-54 (#6) Checking Open/Short 2. CD-73 (#A) – CN-54 (#3) Checking Open/Short 3. CD-73 (#C) – CN-54 (#13) Checking Open/Short				
531	1	10 seconds continuous, 0.3V ≤ Travel Reverse Press. Sensor Measurement Voltage < 0.8V			●
	4	10 seconds continuous, Travel Reverse Press. Sensor Measurement Voltage < 0.3V			●
	(Results / Symptoms) 1. Monitor – Travel Reverse Press. display failure 2. Control Function – Driving interoperability power control operation failure (Checking list) 1. CD-74 (#B) – CN-54 (#23) Checking Open/Short 2. CD-74 (#A) – CN-54 (#3) Checking Open/Short 3. CD-74 (#C) – CN-54 (#13) Checking Open/Short				
705	0	10 seconds continuous, Battery input Voltage > 35V	●		
	1	10 seconds continuous, Battery input Voltage < 18V	●		
	(Results / Symptoms) 1. Control Function – Startup impossibility (Checking list) 1. CS-74A (#1) – CN-51 (#1) Checking Open/Short				
707	1	(When Engine is equal or more than 400 rpm) 10 seconds continuous, Alternator Node L Measurement Voltage < 18V (In case 12v goods, Alternator Node L Measurement Voltage < 9V)	●		
	(Results / Symptoms) 1. Control Function – Battery charging circuit failure (Checking list) 1. CS-74A (#1) – CN-51 (#2) Checking Open/Short				

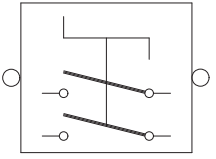
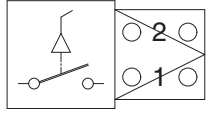
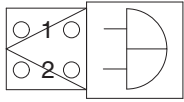
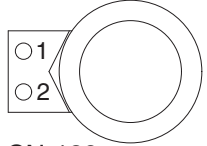
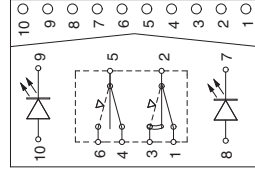
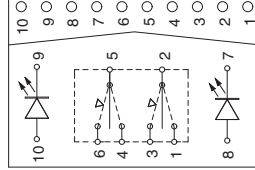
※ Some error codes are not applied to this machine.

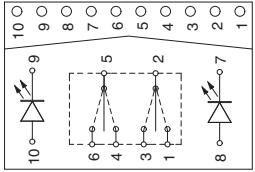
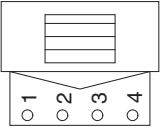
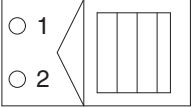
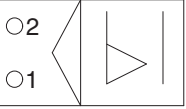
G : General

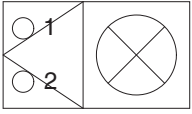
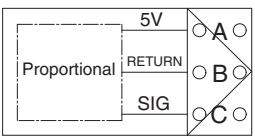
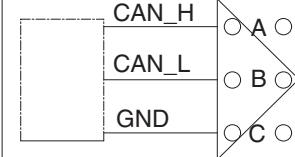
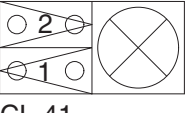
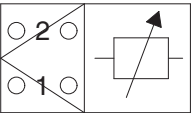
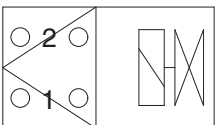
C : Crawler Type

W : Wheel Type

Part name	Symbol	Specifications	Check
Start relay	 <p>CR-23</p>	24V 300A	※ Check contact Normal : 0.94 Ω (for terminal 1-2)
Blower motor		24V 9.5A	※ Check resistance Normal : 2.5 Ω (for terminal 1-2)
Duct sensor (switch)		1°C OFF 4°C ON	※ Check resistance Normal : 0 Ω (for terminal 1-2), the atmosphere temp : Over 4°C
Door switch	 <p>CS-1</p>	24V 2W	※ Check resistance Normal : About 5M Ω
Switch (power max, one touch decel, horn, breaker)	 <p>CS-5 CS-19 CS-26 CS-29</p>	24V 6A	※ Check resistance Normal : ∞ Ω
Circuit breaker	 <p>CN-60 CN-95</p>	60A (CN-60) 90A (CN-95)	※ Check disconnection Normal : 0 Ω (connect ring terminal and check resist between terminal 1 and 2)

Part name	Symbol	Specifications	Check
Master switch	 <p data-bbox="494 459 678 492">CS-74A, CS-74B</p>	6-36V	※ Check disconnection Normal : 0.1 Ω
Breaker switch	 <p data-bbox="486 728 582 761">CS-26A</p>	-	-
Quick clamp buzzer	 <p data-bbox="494 1008 590 1041">CN-113</p>	24V 200mA 107 ± 4dB	-
Socket	 <p data-bbox="502 1321 598 1355">CN-139</p>	12V 10A	-
Switch	 <p data-bbox="454 1612 542 1646">CS-79</p>	-	※ Check contact Normal ON : 0 Ω (for terminal 1-2, 4-5) ∞ Ω (for terminal 2-3, 5-6) OFF : ∞ Ω (for terminal 1-2, 4-5) 0 Ω (for terminal 2-3, 5-6)
Switch	 <p data-bbox="454 1892 542 1926">CS-100</p>	24V 8A	※ Check contact Normal OFF : ∞ Ω (for terminal 1-2, 2-3, 4-5, 5-6)

Part name	Symbol	Specifications	Check								
Switch	 <p>CS-73</p>	24V 8A	※ Check contact Normal OFF : $\infty \Omega$ (for terminal 1-2, 2-3, 4-5, 5-6)								
Fuel heater	 <p>CN-96</p>	-	-								
DEF/AdBlue® line heater	 <p>CN-381 CN-382 CN-383</p>	-	-								
WIF sensor	 <p>CD-45</p>	-	-								
PRS temp sensor	<table border="1" data-bbox="450 1473 730 1585"> <tr> <td>○ 1</td> <td>RETURN</td> </tr> <tr> <td>○ 2</td> <td>AIR TEMP</td> </tr> <tr> <td>○ 3</td> <td>SUPPLY POWER</td> </tr> <tr> <td>○ 4</td> <td>AIR PRESS</td> </tr> </table> <p>CD-10</p>	○ 1	RETURN	○ 2	AIR TEMP	○ 3	SUPPLY POWER	○ 4	AIR PRESS	5.0V 0.2A	※ Check contact Normal 0 Ω (for terminal 1-2, 47.5 Ω) $\infty \Omega$ (for terminal 3-1, 1k Ω) $\infty \Omega$ (for terminal 4-1, 1k Ω)
○ 1	RETURN										
○ 2	AIR TEMP										
○ 3	SUPPLY POWER										
○ 4	AIR PRESS										
DEF/AdBlue® sensor	<table border="1" data-bbox="475 1733 708 1845"> <tr> <td>○ 1</td> <td>POWER 24V</td> </tr> <tr> <td>○ 2</td> <td>CAN LO</td> </tr> <tr> <td>○ 3</td> <td>CAN HI</td> </tr> <tr> <td>○ 4</td> <td>RETURN</td> </tr> </table> <p>CN-J7A CN-J7B CN-J10 CN-J17</p>	○ 1	POWER 24V	○ 2	CAN LO	○ 3	CAN HI	○ 4	RETURN	-	-
○ 1	POWER 24V										
○ 2	CAN LO										
○ 3	CAN HI										
○ 4	RETURN										

Part name	Symbol	Specifications	Check
DEF/AdBlue® fill up warning lamp (LED)	 <p>CL-40</p>	-	-
Proportional valve sensor	 <p>CN-246 CN-247</p>	-	-
Start button	 <p>CS-2B</p>	-	-
DEF/AdBlue® full lamp	 <p>CL-41</p>	-	-
Temperature sensor (A/C incar, A/C ambient, CAC out)	 <p>CN-429</p>	-	-
EPPR valve	 <p>CN-384 CN-J31</p>	24V 700mA	※ Check resistance Normal : 15~25 Ω (For terminal 1-2)

Part name	Symbol	Specifications	Check												
DEF/AdBlue® tank level sensor	<table border="1" data-bbox="448 309 719 443"> <tr><td>○ 1</td><td>POWER</td></tr> <tr><td>○ 2</td><td>RETURN</td></tr> <tr><td>○ 3</td><td>CAN HIGH</td></tr> <tr><td>○ 4</td><td>CAN LOW</td></tr> </table> <p data-bbox="448 454 655 483">CN-380 CN-399</p>	○ 1	POWER	○ 2	RETURN	○ 3	CAN HIGH	○ 4	CAN LOW	-	-				
○ 1	POWER														
○ 2	RETURN														
○ 3	CAN HIGH														
○ 4	CAN LOW														
Proportional valve sensor	<table border="1" data-bbox="448 595 719 730"> <tr><td>○ 1</td><td>SIG. V(Us)</td></tr> <tr><td>○ 2</td><td>SIG. V(Udc)</td></tr> <tr><td>○ 3</td><td>GND</td></tr> <tr><td>○ 4</td><td>ERROR</td></tr> </table> <p data-bbox="448 741 544 770">CN-308</p>	○ 1	SIG. V(Us)	○ 2	SIG. V(Udc)	○ 3	GND	○ 4	ERROR	-	-				
○ 1	SIG. V(Us)														
○ 2	SIG. V(Udc)														
○ 3	GND														
○ 4	ERROR														
Camera	<table border="1" data-bbox="475 853 683 1021"> <tr><td>○ 1</td><td>LVDS POS</td></tr> <tr><td>○ 2</td><td>GND</td></tr> <tr><td>○ 3</td><td>LVDS NEG</td></tr> <tr><td>○ 4</td><td>POWER 24V</td></tr> <tr><td>○ 5</td><td>NC</td></tr> <tr><td>○ 6</td><td>ADJUST SIGNAL</td></tr> </table> <p data-bbox="475 1032 687 1088">CN-402 CN-403 CN-404 CN-405</p>	○ 1	LVDS POS	○ 2	GND	○ 3	LVDS NEG	○ 4	POWER 24V	○ 5	NC	○ 6	ADJUST SIGNAL	-	-
○ 1	LVDS POS														
○ 2	GND														
○ 3	LVDS NEG														
○ 4	POWER 24V														
○ 5	NC														
○ 6	ADJUST SIGNAL														

GROUP 4 CONNECTORS

1. CONNECTOR DESTINATION

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-1	AMP	10	l/conn (Frame harness-Pump PS harness)	S816-010002	S816-110002
CN-2	AMP	15	l/conn (Frame harness-Engine harness)	2-85262-1	368301-1
CN-3	TYCO	12	l/conn (Frame harness-Pro vlv harness)	174661-2	368537-1
CN-4	AMP	16	l/conn (Console harness LH-Frame harness)	368047-1	368050-1
CN-5	DEUTSCH	60	l/conn (Side harness RH-Frame harness)	DRB16-60SAE-L018	DRB14-60PAE-L018
CN-6	AMP	16	l/conn (Console harness RH-Frame harness)	368047-1	368050-1
CN-7	AMP	15	l/conn (Console harness RH-Frame harness)	2-85262-1	368301-1
CN-8	AMP	10	l/conn (Console harness RH-Frame harness)	S816-010002	174655-2
CN-9	DEUTSCH	12	l/conn (Frame harness-AAVM harness)	DT06-12SA-P021	DT04-12PA-P021
CN-10	DEUTSCH	12	l/conn (Cab harness-Side harness RH)	DT06-12S-EP06	DT04-12PA-P021
CN-11	DEUTSCH	8	l/conn (Frame harness-Aircon harness)	DT06-8S-EP06	-
CN-12	DEUTSCH	2	l/conn (Frame harness-Boom wire harness)	DT06-2S-EP06	DT04-2P-E004
CN-13	AMP	6	l/conn (Frame harness-2 Way harness)	174262-2	174264-2
CN-13	AMP	4	Swing parking & fine control	174257-2	174259-2
CN-14	AMP	4	l/conn (Frame harness-2 Way harness)	174257-2	174259-2
CN-15	AMP	8	l/conn (Frame harness-2 Way harness)	174982-2	174984-2
CN-16	AMP	6	Emergency engine start & speed control	S816-006002	S816-106002
CN-17	AMP	8	l/conn (Side harness RH-Wiper harness)	S816-008002	S816-108002
CN-18	AMP	2	l/conn (Frame harness-Low wiper washer tank harness)	174352-2	174354-2
CN-20	MOLEX	2	Horn	36825-0211	-
CN-21	AMP	6	Wiper motor	S810-006202	-
CN-22	KET	2	Washer tank 1	MG640605	-
CN-23	KET	2	Speaker-LH	MG610070	-
CN-24	KET	2	Speaker-RH	MG610070	-
CN-25	DEUTSCH	2	Horn	DT06-2S-EP06	-
CN-27A	KUM	16	Radio & USB player	PK145-16017	-
CN-27B	AMP	8	Radio & USB player	-	174984-2
CN-28	KUM	1	Aircon compressor	NMWP01F-B	-
CN-29	KET	2	Receiver dryer	MG640795	-
CN-36	-	-	Fuse & relay box	21Q7-10910	-
CN-45	RING-TERM	-	Starter motor B ⁺	S820-108000	-
CN-48	KET	1	Hour meter	2-520193-2	-
CN-51	DEUTSCH	40	MCU	DRC26-40SA	-
CN-52	DEUTSCH	40	MCU	DRC26-40SB	-
CN-53	DEUTSCH	40	MCU	DRC26-40SA	-

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-56A	AMP	12	Cluster	-	174663-2
CN-56B	AMP	8	Cluster	-	174984-2
CN-60	YAZAKI	2	Circuit breaker	-	7222-4220-30
CN-61	DEUTSCH	2	Fuel filler pump	DT06-2S-EP06	-
CN-66	DEUTSCH	2	Solenoid (A2)	DT06-2S-EP06	-
CN-68	DEUTSCH	2	Safety solenoid	DT06-2S-EP06	-
CN-70	DEUTSCH	2	Travel high solenoid	DT06-2S-EP06	-
CN-74	RING-TERM	1	Alternator "B" terminal	-	S820-108000
CN-74	RING-TERM	1	Alternator "L" terminal	-	S820-105000
CN-75	AMP	2	Pump EPPR	S816-002002	-
CN-80	RING-TERM	-	Glow plug	S820-306000	-
CN-81	DEUTSCH	2	Travel buzzer solenoid	DT06-2S-EP06	-
CN-88	DEUTSCH	2	Power max solenoid	DT06-2S-EP06	-
CN-93	DELPHI	60	ECM	13964577	-
CN-95	YAZAKI	2	Circuit breaker	-	7222-4220-30
CN-100	KET	1	ECM ground	MG640944-5	-
CN-113	KET	2	Buzzer	MG651205-5	-
CN-125	Econoseal J	4	GPS connector	S816-004002	S816-104002
CN-125A	DEUTSCH	12	GPS	DT06-12S-P021	DT04-12PA-P021
CN-126	DEUTSCH	4	RS232	DT06-4S	DT04-4P
CN-126	TYCO	10	l/conn (Frame harness-Sevice tool harness)	2-1418390-1	S816-11002
CN-133	DEUTSCH	2	Boom priority solenoid	DT06-2S-EP06	-
CN-135	DEUTSCH	2	Arm regeneration solenoid	DT06-2S-EP06	-
CN-138	FASTEN	3	DC/DC converter	S810-003202	-
CN-139	FASTEN	2	12V socket	172434-2	-
CN-140	DEUTSCH	2	Quick clamp solenoid	DT06-2S-EP06	DT04-2P-E005
CN-141	AMP	13	Wiper motor controller	172498-1	-
CN-147	AMP	4	Fuel heater	2-967325-3	-
CN-149	DEUTSCH	2	Attach safety solenoid (A1)	DT06-2S-EP06	-
CN-156	DEUTSCH	2	Air seat heat	DT06-2S-EP06	DT04-2P
CN-157	AMP	1	Antena power	S822-014002	-
CN-173	DEUTSCH	3	Resistor	DT06-3S-EP06	DT04-3P-EP10
CN-174	DEUTSCH	3	Resistor	DT06-3S-EP06	DT04-3P-EP10
CN-237	DEUTSCH	2	Attach conflux solenoid (A3)	DT06-2S-EP06	-
CN-242	AMP	2	Attach EPPR 1 (A1)	174352-2	-
CN-243	AMP	2	Attach EPPR 2 (A2)	174352-2	-
CN-245	FCI	4	PTC power	180900-0	-
CN-246	DEUTSCH	3	Proportional valve-RH	DT06-3S	DT04-3P

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-247	DEUTSCH	3	Proportional valve-LH	DT06-3S	DT04-3P
CN-249	DEUTSCH	4	Rear view camera	DT06-4S-EP06	DT04-4P-E005
CN-258	KET	1	Air compressor power	MG640944-5	MG650943-5
CN-262	-	2	Straight travel solenoid	174352-2	174354-2
CN-262A	DEUTSCH	2	Straight travel solenoid 1	DT06-2S-EP06	-
CN-262B	DEUTSCH	2	Straight travel solenoid 2	DT06-2S-EP06	-
CN-263	DEUTSCH	2	Air compressor relay	DT06-2S-EP06	DT04-2P-E005
CN-305	DEUTSCH	12	AAVM-Connector-1	DTM06-12SA	-
CN-306	DEUTSCH	12	AAVM-Connector-2	DTM06-12SB	-
CN-307	DEUTSCH	3	Proportional-Service tool	DT06-3S-EP06	DT06-3P-E005
CN-308	AMP	4	Proportional-PVG32	2-967059-1	-
CN-309	DEUTSCH	2	Proportional-EPPR valve-A1	DT06-2S-EP06	-
CN-310	DEUTSCH	2	Proportional-EPPR valve-A2	DT06-2S-EP06	-
CN-363	AMP	12	Haptic controller	174045-2	-
CN-365	DEUTSCH	2	Attach EPPR valve-LH	DT06-2S-EP06	DT04-2P-E005
CN-366	DEUTSCH	2	Attach EPPR valve-RH	DT06-2S-EP06	DT04-2P-E005
CN-367	DEUTSCH	2	Boom down floating solenoid	85202-1	-
CN-368	DEUTSCH	2	Boom up floating solenoid	DT06-2S-EP06	-
CN-369	DEUTSCH	2	Boom down cut off solenoid	DT06-2S-EP06	DT04-2P-E005
CN-370	DEUTSCH	2	Swing fine control solenoid	DT06-2S-EP06	DT04-2P-E005
CN-376	TYCO	34	Membrane controller	4-1437290-1	-
CN-379	TYCO	12	SCR & DEF/AdBlue® supply module	2-1703639-1	-
CN-381	TYCO	2	DEF/AdBlue® line heater 1	C-0936059-01	-
CN-382	TYCO	2	DEF/AdBlue® line heater 2	C-0936059-01	-
CN-383	TYCO	2	DEF/AdBlue® line heater 3	C-0936059-01	-
CN-384	DEUTSCH	2	Coolant valve	DT06-2S-EP06	-
CN-385	-	7	Fan clutch	965570	-
CN-398	DEUTSCH	4	RS232	DT06-4S-EP06	DT04-4P-E005
CN-399	TYCO	4	DEF/AdBlue® tank level sensor	-	1-967325-1
CN-401	FCI	90	AAVM controller	-	-
CN-402	DEUTSCH	6	Front view camera	DT06-6S-P021	DT04-6P-P021
CN-403	DEUTSCH	6	Rear view camera	DT06-6S-EP06	DT04-6P-EP14
CN-404	DEUTSCH	6	LH view camera	DT06-6S-EP06	DT04-6P-EP14
CN-405	DEUTSCH	6	RH view camera	DT06-6S-EP06	DT04-6P-EP14
CN-406	DEUTSCH	3	Service tool	DT06-3S-EP06	DT06-3P-E005
CN-407	-	4	Low wiper motor	174257-2	174259-2
CN-408	AMP	2	Low washer tank	MG640605	-
CN-419	DEUTSCH	2	Swing parking-A3	DT06-2S-EP06	-

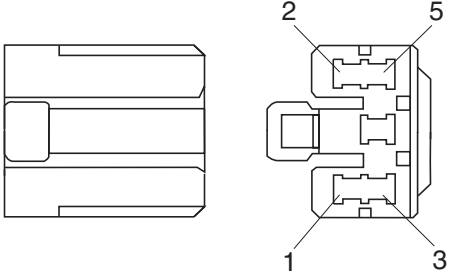
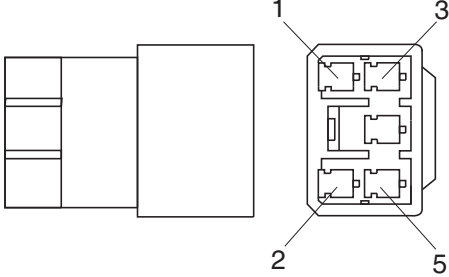
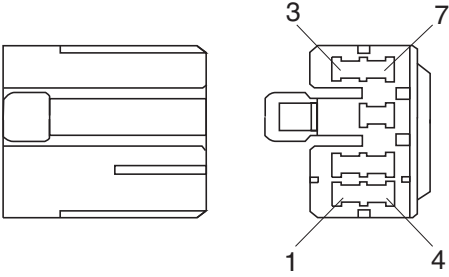
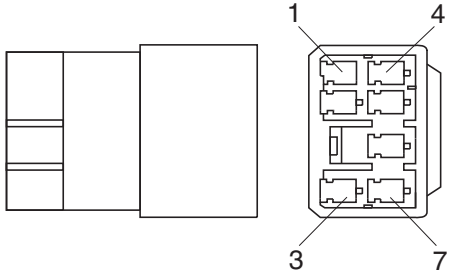
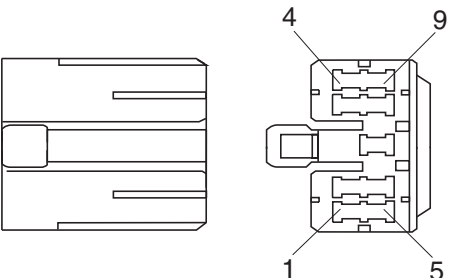
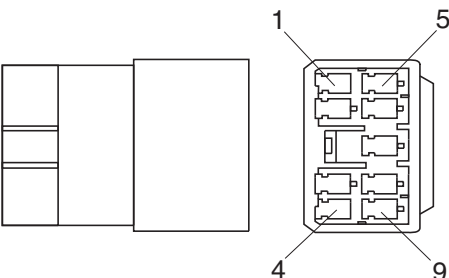
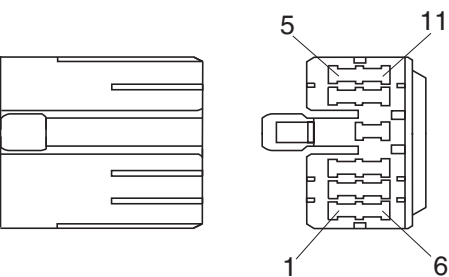
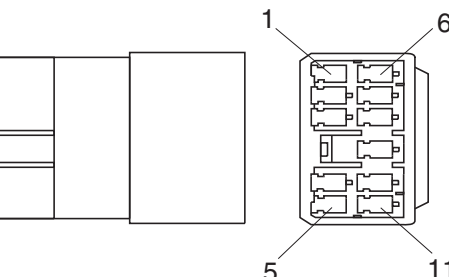
Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-420	DEUTSCH	2	Swing parking-A2	DT06-2S-EP06	-
CN-421	DEUTSCH	2	Swing parking-A1	DT06-2S-EP06	-
CN-427	MOLEX	4	Reader-RMS	039012040	026013096
CN-429	-	4	CAC out temp sensor	-	S822-11400
CN-430	DEUTSCH	6	Aftertreatment harness	-	DT04-6P-E005
CN-J7A	TYCO	4	DOC NOx sensor	2-1418390-1	-
CN-J7B	TYCO	4	SCR NOx sensor	1-1418390-1	-
CN-J10	TYCO	4	SCR Thermistor	3-1418390-1	-
CN-J17	TYCO	4	DOC Thermistor	4-1418390-1	-
CN-J31	BOSCH	2	DEF/AdBlue® dosing module	1_928_403_874	-
· Relay					
CR-1	RING-TERM	-	Battery relay coll	ST710289-2	-
CR-2	-	5	Horn relay	-	-
CR-4	-	5	Working lamp relay	-	-
CR-5	-	5	Anti restart relay	-	-
CR-7	-	5	Aircon compressor relay	-	-
CR-9	-	5	Cabin lamp relay	-	-
CR-13	-	5	Head lamp relay	-	-
CR-23	KET	2	Start relay	S814-002001	S814-102001
CR-24	RING TERM	1	Preheat relay	S822-014000	-
CR-35	-	5	Power relay	-	-
CR-36	-	5	Air preheat relay	-	-
CR-39	-	5	Starter lock out relay	-	-
CR-45	-	5	Beacon lamp relay	-	-
CR-46	-	5	Fuel warmer relay	-	-
CR-50	-	5	NOx sensor relay	-	-
CR-51	-	5	DEF/AdBlue® module relay	-	-
CR-52	-	5	Line heater relay	-	-
· Switch					
CS-1	SHUR	1	Door switch	S822-014002	S822-114002
CS-2A	WP	6	Start key switch	S814-006100	-
CS-2B	DEUTSCH	3	Reader	DT06-3S-EP06	DT04-3P-E005
CS-4	DEUTSCH	3	Safety switch	DT06-3S	-
CS-5	DEUTSCH	2	Horn switch	-	DT04-2P
CS-19	DEUTSCH	2	One touch decel switch	-	DT04-2P
CS-26	DEUTSCH	2	Breaker switch	DT06-2S	-
CS-26A	AMP	2	Breaker pedal switch	S816-002002	S816-102002
CS-29	DEUTSCH	2	Power max switch	DT06-2S	-

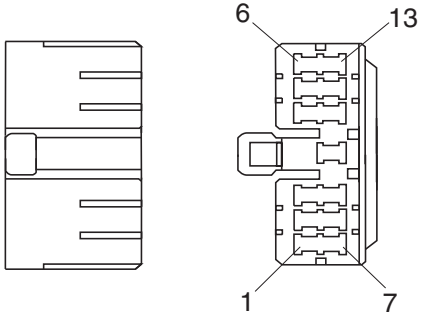
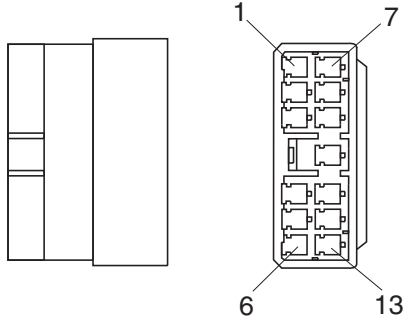
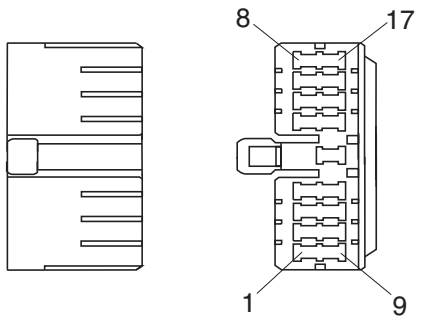
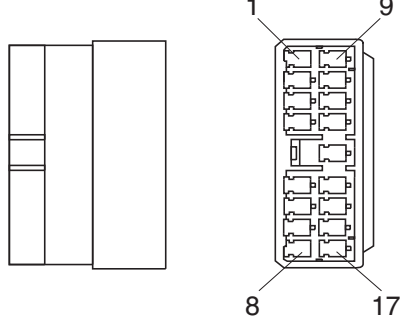
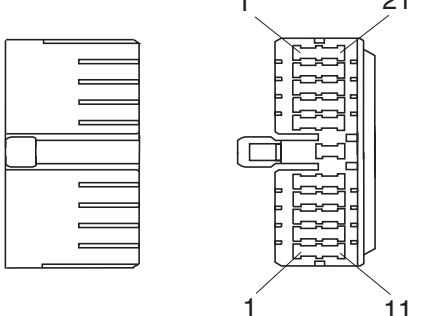
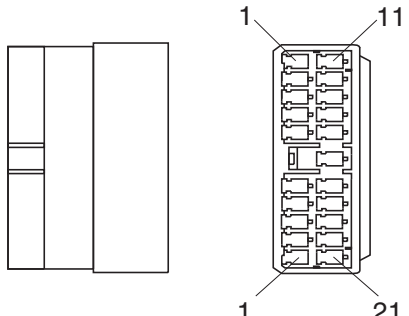
Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CS-33	AMP	6	Emergency engine stop switch	S816-006002	S816-106002
CS-52	CARLING	10	Adjust & dozer switch	VC2-01	-
CS-53	AMP	1	Wiper cut switch	S822-014002	-
CS-67	CARLING	10	Quick clamp switch	VC2-01	-
CS-73	CARLING	10	Swing lock & fine switch	VC2-01	-
CS-74A	TYCO	2	Master switch	4-1437290-1	813-130201
CS-74B	DEUTSCH	2	Master switch	-	DT04-2P-E005
CS-79	CARLING	10	Lower wiper switch	VC2-01	-
CS-83	CARLING	10	Spare switch	VC2-01	-
CS-99	CARLING	10	Air compressor switch	VC2-01	-
CS-100	CARLING	10	SCR system cleaning switch	VC2-01	-
CS-107	CARLING	10	Travel straight switch	VC2-01	-
CS-108	CARLING	10	Auto grease switch	VC2-01	-
CS-111	CARLING	10	Boom floating switch	VC2-01	-
· Light					
CL-1	KET	3	Room lamp	MG651032	-
CL-2	AMP	1	Cigar lighter	S822-014002	S822-114002
CL-3	DEUTSCH	2	Head lamp-LH	DT06-2S-EP06	DT04-2P
CL-4	DEUTSCH	2	Head lamp-RH	DT06-2S-EP06	DT04-2P
CL-5	DEUTSCH	2	Work lamp-LH	DT06-2S-EP06	DT04-2P
CL-6	DEUTSCH	2	Work lamp-RH	DT06-2S-EP06	DT04-2P
CL-7	SHUR	1	Beacon lamp	S822-014002	S822-114002
CL-8	-	1	Beacon lamp harness	S822-014004	S822-114004
CL-8	DEUTSCH	2	Cab light-LH	DT06-2S-EP06	DT04-2P
CL-9	DEUTSCH	2	Cab light-RH	DT06-2S-EP06	DT04-2P
CL-10	DEUTSCH	2	Cab light-RH	DT06-2S-EP06	DT04-2P
CL-24	DEUTSCH	2	Rear work lamp	DT06-2S-EP06	DT04-2P-E005
CL-24B	-	24	ECM J1	F934000	-
CL-36	DEUTSCH	2	Work lamp	DT06-2S-EP06	DT04-2P
CL-37	DEUTSCH	2	Work lamp	DT06-2S-EP06	DT04-2P
CL-40	DEUTSCH	2	DEF/AdBlue® purging lamp	DT06-2S-EP06	DT04-2P
CL-41	AMP	1	DEF/AdBlue® F/warning lamp	S822-01400	S822-11400
· Sensor, sensor					

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CD-1	AMP	2	Hydraulic oil temp sender	85202-1	-
CD-2	DEUTSCH	2	Fuel sender	DT06-2S-EP06	-
CD-6	DEUTSCH	3	Travel pressure switch	DT06-3S-EP06	-
CD-7	DEUTSCH	3	Working pressure switch	DT06-3S-EP06	-
CD-10	SUMITOMO	4	Air cleaner switch	6098-0144	-
CD-16	AMP	3	Water level sensor	12110293	-
CD-24	DEUTSCH	3	Swing sensor	DT06-3S-EP06	-
CD-31	DEUTSCH	3	Overload sensor	DT06-3S-EP06	-
CD-32	DEUTSCH	3	Boom up sensor	DT06-3S-EP06	-
CD-35	DEUTSCH	3	Arm in/out and bucket in sensor	DT06-3S-EP06	-
CD-42	DEUTSCH	3	Pump pressure 1	DT06-3S-EP06	-
CD-43	DEUTSCH	3	Pump pressure 2	DT06-3S-EP06	-
CD-44	DEUTSCH	3	Pump pressure 3	DT06-3S-EP06	-
CD-45	DEUTSCH	2	WIF sensor	DT06-2S-EP06	-
CD-69	DEUTSCH	3	Attach pressure sensor	DT06-3S-EP06	-
CD-70	DEUTSCH	3	N1 pressure sensor	DT06-3S-EP06	-
CD-71	DEUTSCH	3	N2 pressure sensor	DT06-3S-EP06	-
CD-85	DEUTSCH	3	Boom down sensor	DT06-3S-EP06	-
CD-90	DEUTSCH	3	Arm in sensor	DT06-3S-EP06	-
CD-124	DEUTSCH	3	Boom cylinder rod pressure snensor	DT06-3S-EP06	-
CD-421	DEUTSCH	2	Swing fine control solenoid	DT06-2S-EP06	-

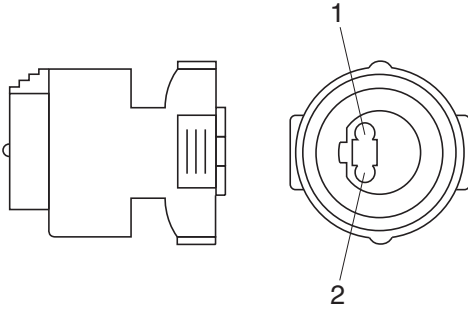
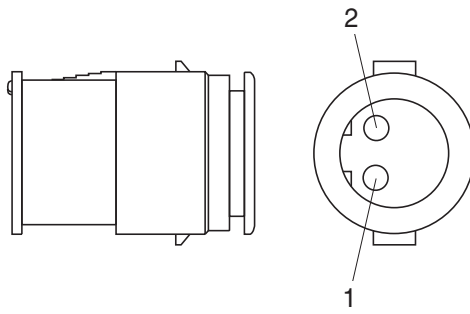
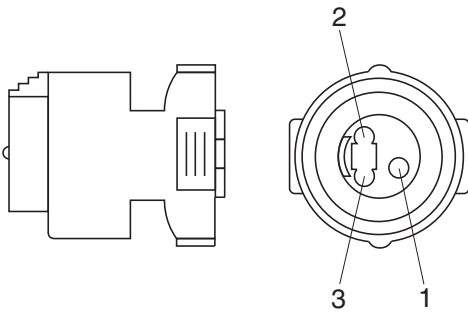
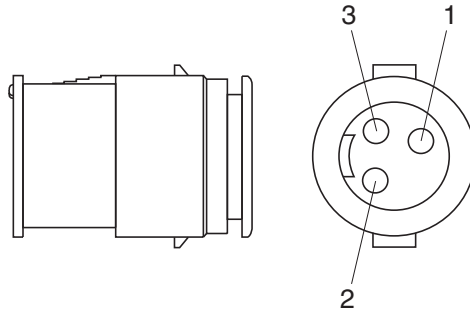
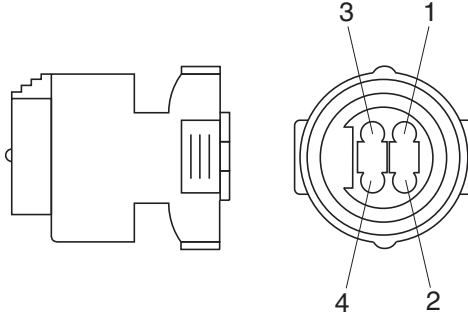
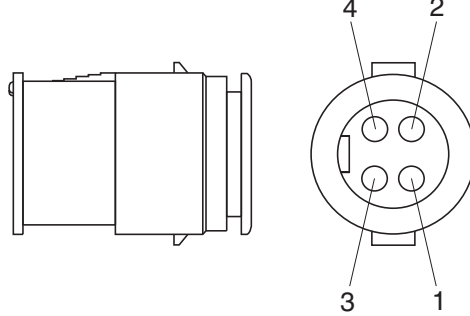
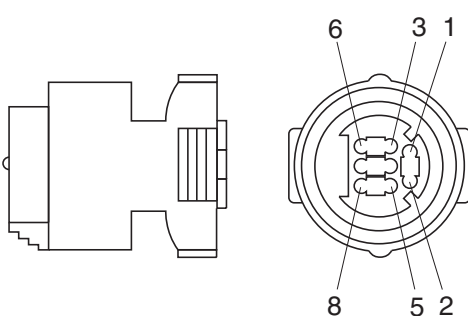
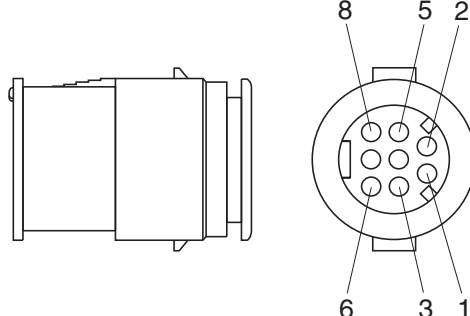
2. CONNECTION TABLE FOR CONNECTORS

1) PA TYPE CONNECTOR

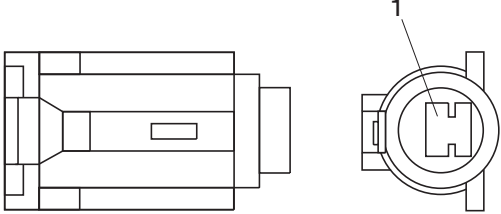
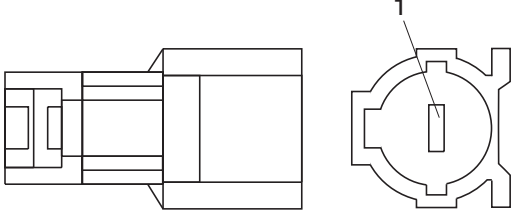
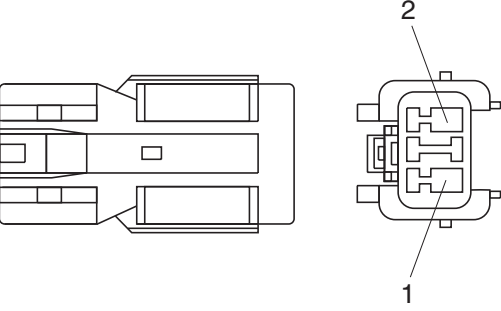
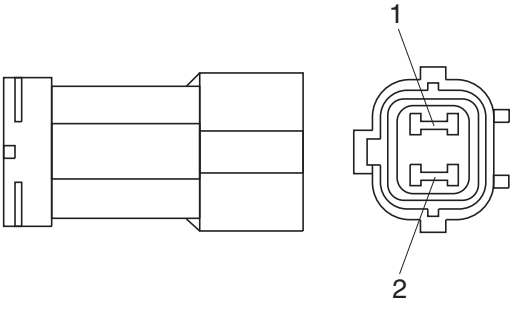
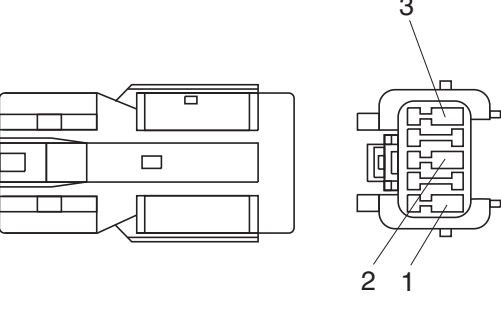
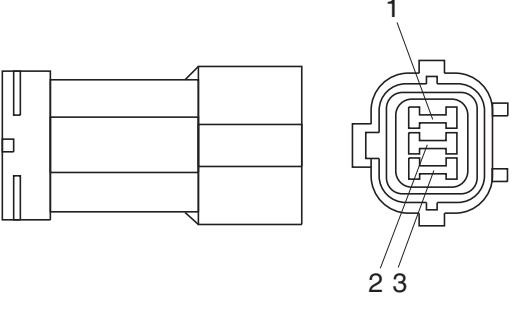
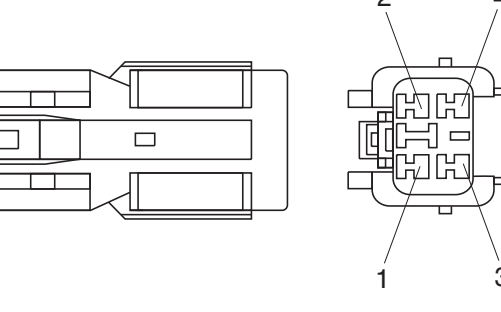
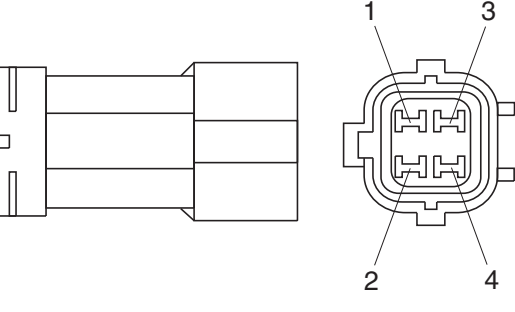
No. of pin	Receptacle connector (female)	Plug connector (male)
5	 <p style="text-align: center;">S811-005002</p>	 <p style="text-align: center;">S811-105002</p>
7	 <p style="text-align: center;">S811-007002</p>	 <p style="text-align: center;">S811-107002</p>
9	 <p style="text-align: center;">S811-009002</p>	 <p style="text-align: center;">3S811-109002</p>
11	 <p style="text-align: center;">S811-011002</p>	 <p style="text-align: center;">S811-111002</p>

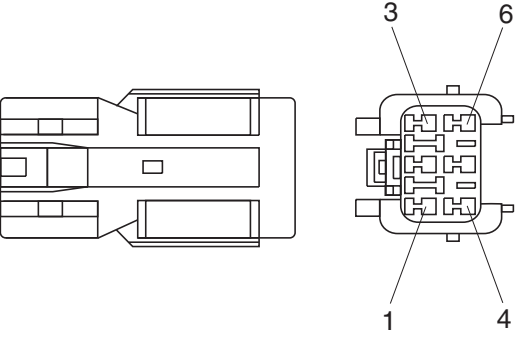
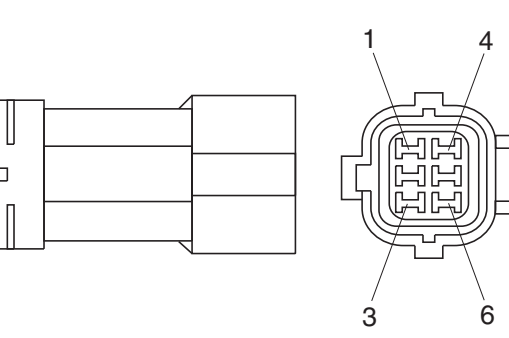
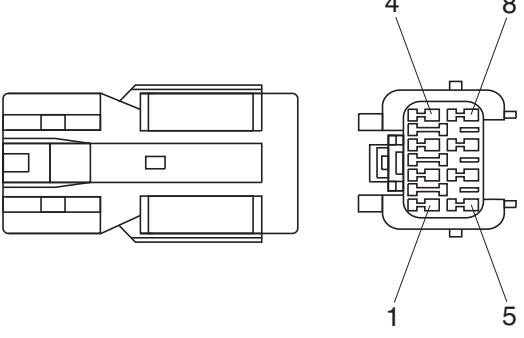
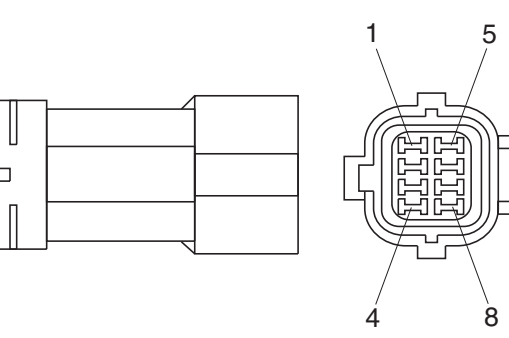
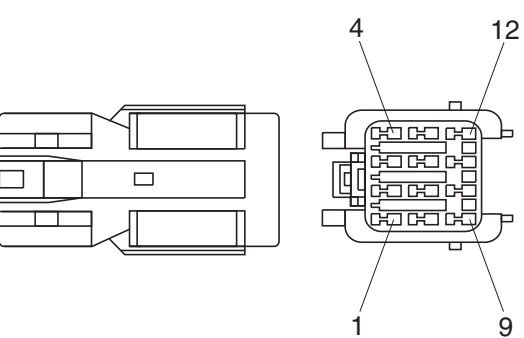
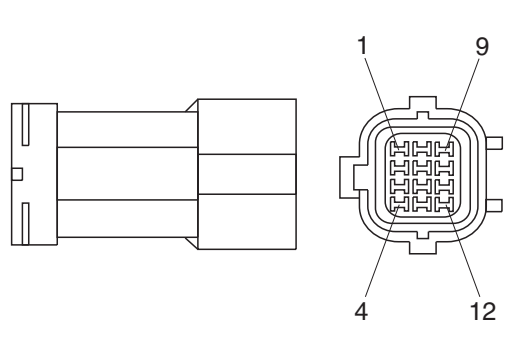
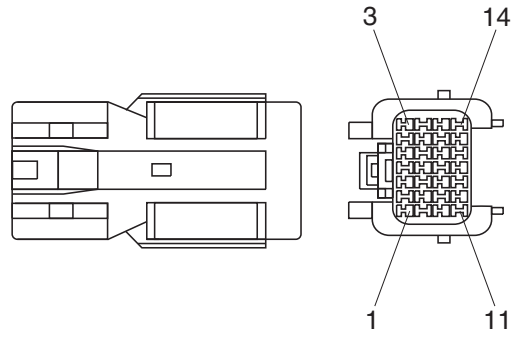
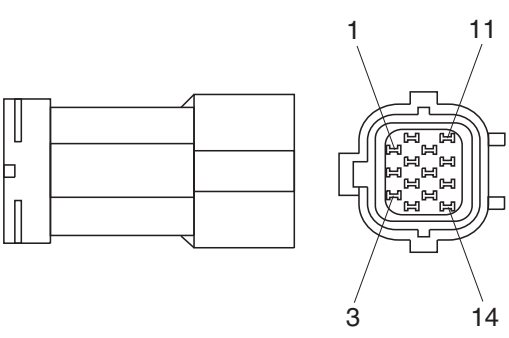
No. of pin	Receptacle connector (female)	Plug connector (male)
13	 <p style="text-align: center;">S811-013002</p>	 <p style="text-align: center;">S811-113002</p>
17	 <p style="text-align: center;">S811-017002</p>	 <p style="text-align: center;">S811-117002</p>
21	 <p style="text-align: center;">S811-021002</p>	 <p style="text-align: center;">S811-121002</p>

2) J TYPE CONNECTOR

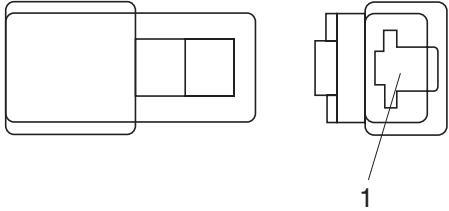
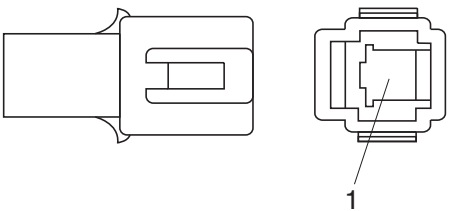
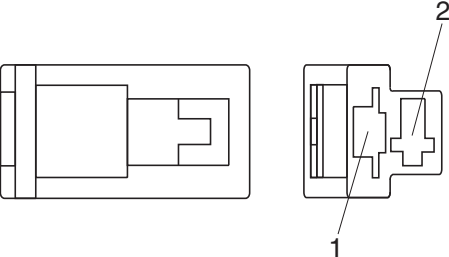
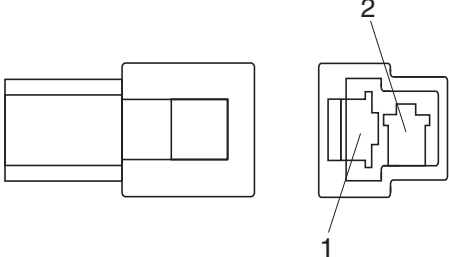
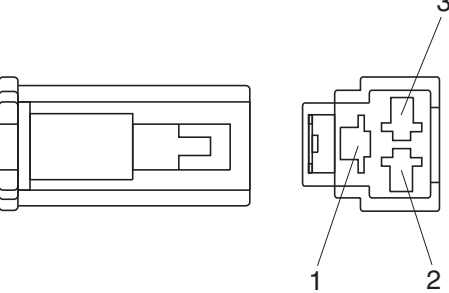
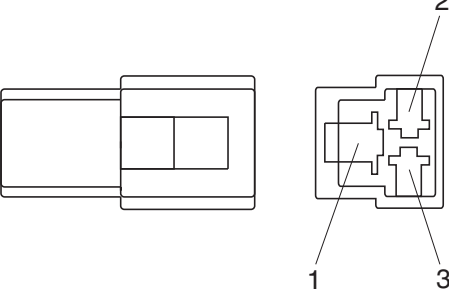
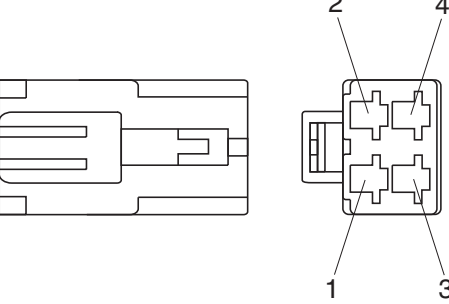
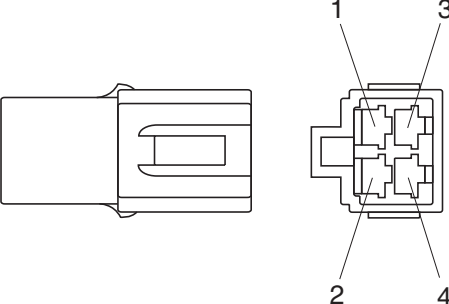
No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p data-bbox="686 683 829 705">S816-002001</p>	 <p data-bbox="1236 683 1380 705">S816-102001</p>
3	 <p data-bbox="686 1086 829 1108">S816-003001</p>	 <p data-bbox="1236 1086 1380 1108">S816-103001</p>
4	 <p data-bbox="686 1489 829 1512">S816-004001</p>	 <p data-bbox="1236 1489 1380 1512">S816-104001</p>
8	 <p data-bbox="686 1892 829 1915">S816-008001</p>	 <p data-bbox="1236 1892 1380 1915">S816-108001</p>

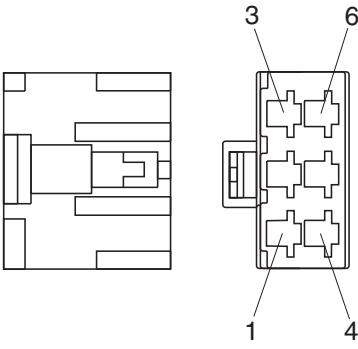
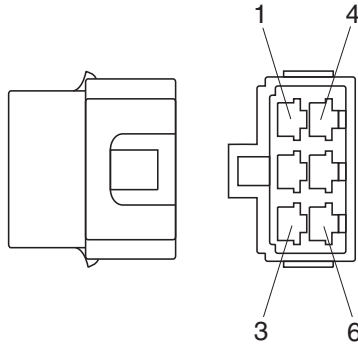
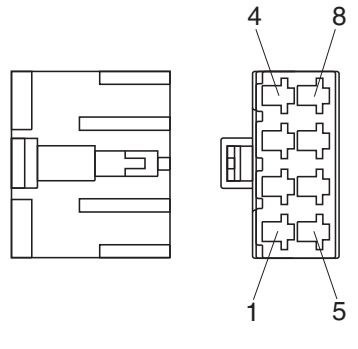
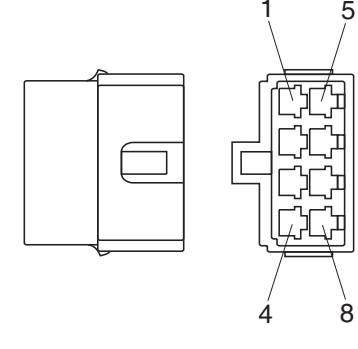
3) SWP TYPE CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p data-bbox="687 680 836 707">S814-001000</p>	 <p data-bbox="1241 680 1390 707">S814-101000</p>
2	 <p data-bbox="687 1084 836 1111">S814-002000</p>	 <p data-bbox="1241 1084 1390 1111">S814-102000</p>
3	 <p data-bbox="687 1494 836 1520">S814-003000</p>	 <p data-bbox="1241 1494 1390 1520">S814-103000</p>
4	 <p data-bbox="687 1904 836 1930">S814-004000</p>	 <p data-bbox="1241 1904 1390 1930">S814-104000</p>

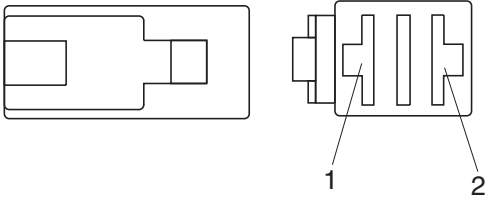
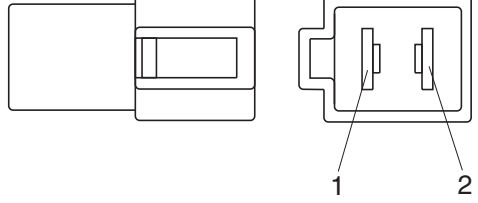
No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p data-bbox="686 638 837 672">S814-006000</p>	 <p data-bbox="1244 638 1396 672">S814-106000</p>
8	 <p data-bbox="686 1041 837 1075">S814-008000</p>	 <p data-bbox="1244 1041 1396 1075">S814-108000</p>
12	 <p data-bbox="686 1444 837 1478">S814-012000</p>	 <p data-bbox="1244 1444 1396 1478">S814-112000</p>
14	 <p data-bbox="686 1848 837 1881">S814-014000</p>	 <p data-bbox="1244 1848 1396 1881">S814-114000</p>

4) CN TYPE CONNECTOR

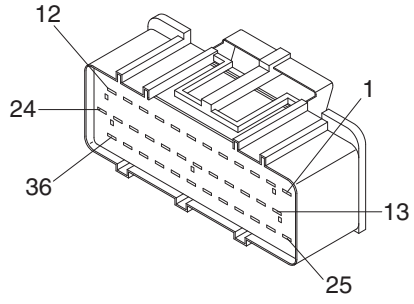
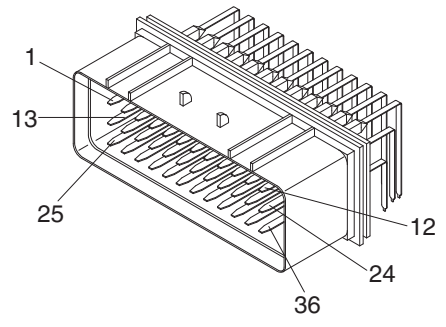
No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p style="text-align: center;">S810-001202</p>	 <p style="text-align: center;">S810-101202</p>
2	 <p style="text-align: center;">S810-002202</p>	 <p style="text-align: center;">S810-102202</p>
3	 <p style="text-align: center;">S810-003202</p>	 <p style="text-align: center;">S810-103202</p>
4	 <p style="text-align: center;">S810-004202</p>	 <p style="text-align: center;">S810-104202</p>

No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p data-bbox="686 638 837 672">S810-006202</p>	 <p data-bbox="1244 638 1396 672">S810-106202</p>
8	 <p data-bbox="686 1041 837 1075">S810-008202</p>	 <p data-bbox="1244 1041 1396 1075">S810-108202</p>

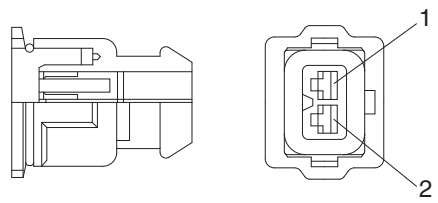
5) 375 FASTEN TYPE CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: center;">S810-002402</p>	 <p style="text-align: center;">S810-102402</p>

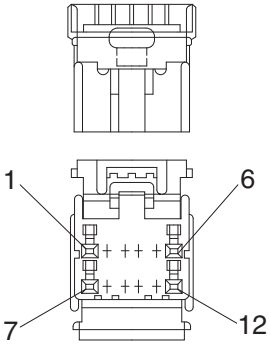
6) AMP ECONOSEAL CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
36	 <p style="text-align: center;">344111-1</p>	 <p style="text-align: center;">344108-1</p>

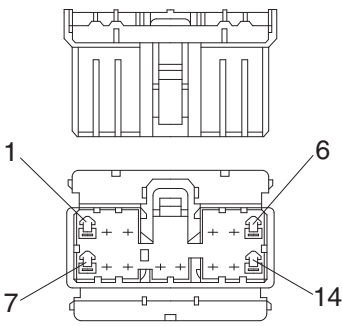
7) AMP TIMER CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: center;">85202-1</p>	

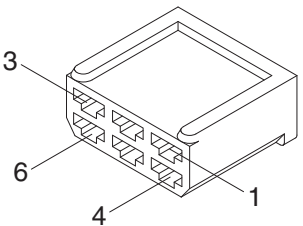
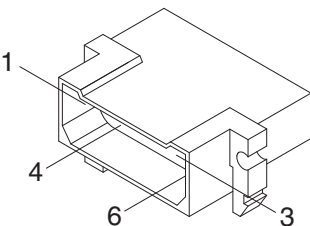
8) AMP 040 MULTILOCK CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
12	 <p style="text-align: right;">174045-2</p>	

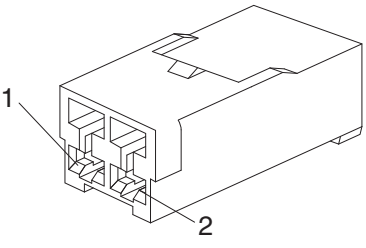
9) AMP 070 MULTILOCK CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
14	 <p style="text-align: right;">173852</p>	

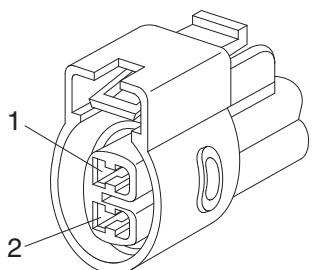
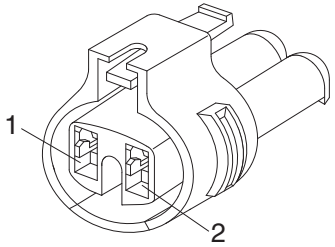
10) AMP FASTIN - FASTON CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p style="text-align: right;">925276-0</p>	 <p style="text-align: right;">480003-9</p>

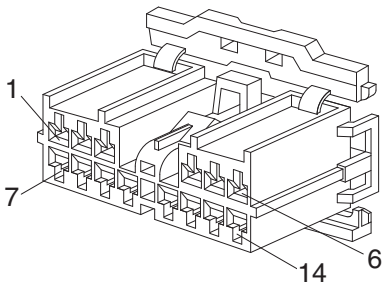
11) KET 090 CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p data-bbox="715 678 837 707">MG610070</p>	

12) KET 090 WP CONNECTORS

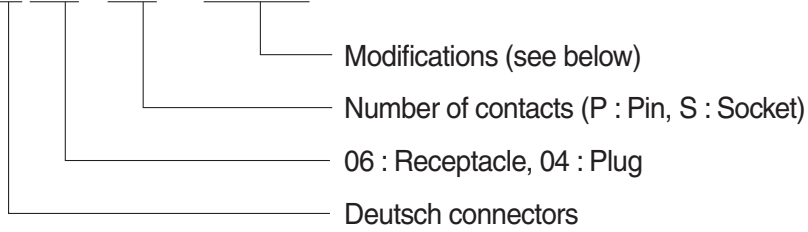
No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p data-bbox="715 1283 837 1312">MG640605</p>	
2	 <p data-bbox="715 1686 837 1715">MG640795</p>	

13) KET SDL CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
14	 <p>MG610406</p>	

14) DEUTSCH DT CONNECTORS

DT 06 - 3S - ★★☆☆



※ Modification

E003 : Standard end cap - gray

E004 : Color of connector to be black

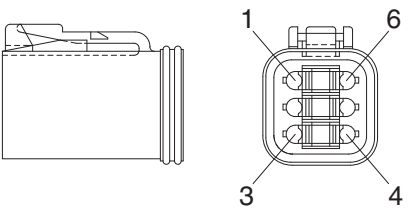
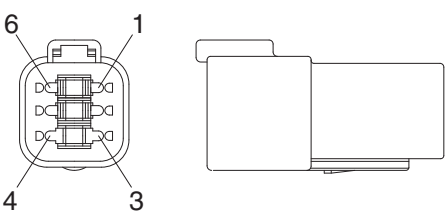
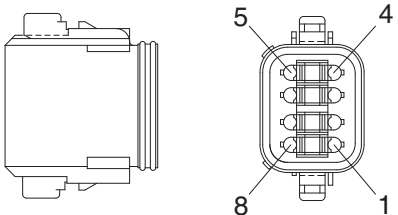
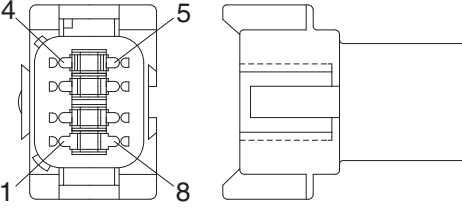
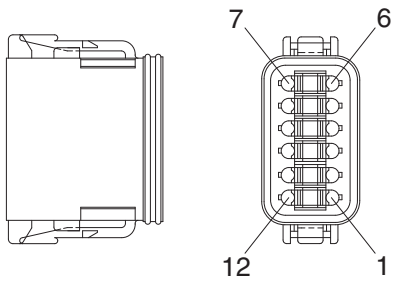
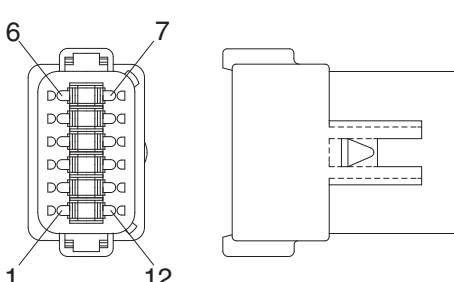
E005 : Combination - E004 & E003

EP04 : End cap

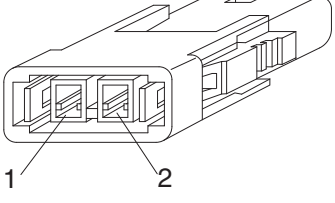
EP06 : Combination P012 & EP04

P012 : Front seal enhancement - connectors color to black for 2, 3, 4 & 6pin

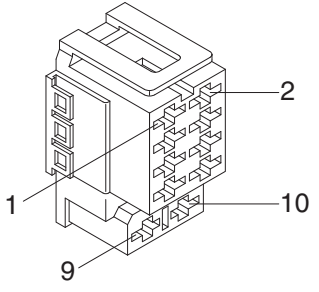
No. of pin	Receptacle connector (female)	Plug connector (male)
2	<p>DT06-2S</p>	<p>DT04-2P</p>
3	<p>DT06-3S</p>	<p>DT04-3P</p>
4	<p>DT06-4S</p>	<p>DT04-4P</p>

No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p style="text-align: center;">DT06-6S</p>	 <p style="text-align: center;">DT04-6P</p>
8	 <p style="text-align: center;">DT06-8S</p>	 <p style="text-align: center;">DT04-8P</p>
12	 <p style="text-align: center;">DT06-12S</p>	 <p style="text-align: center;">DT04-12P</p>

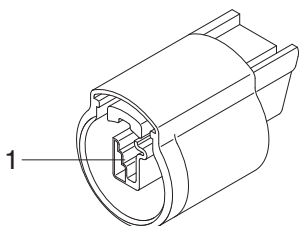
15) MOLEX 2CKTS CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p data-bbox="702 683 837 705">35215-0200</p>	

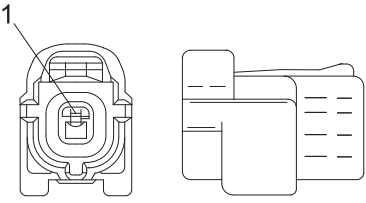
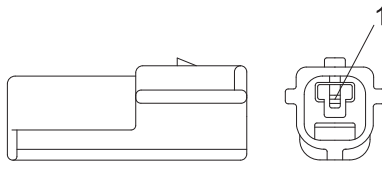
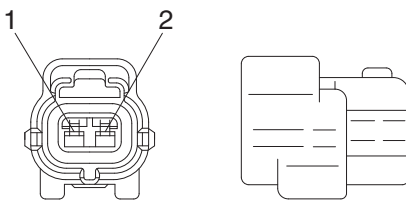
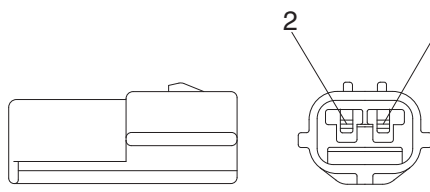
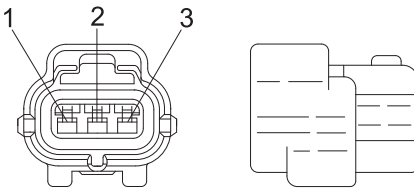
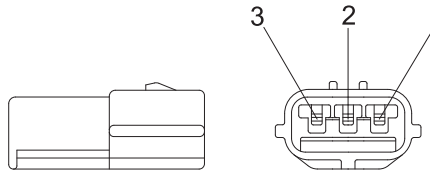
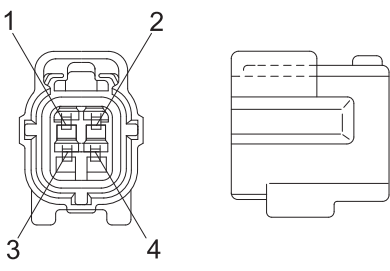
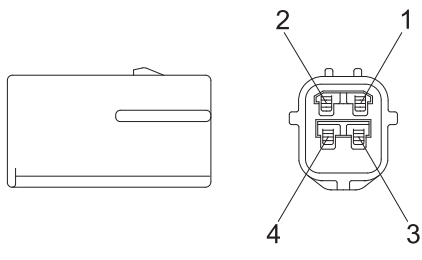
16) ITT SWF CONNECTOR

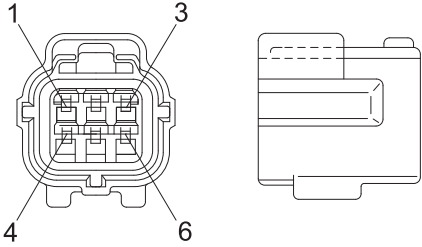
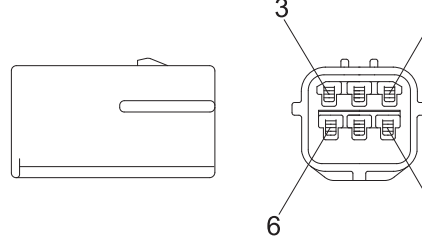
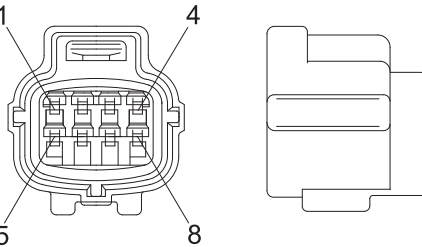
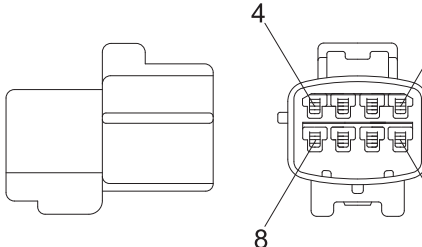
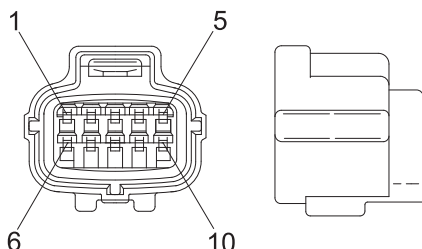
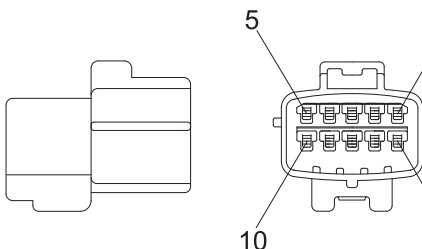
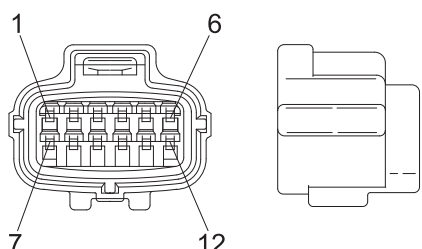
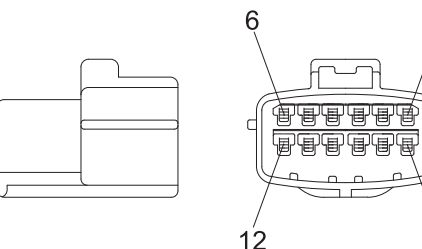
No. of pin	Receptacle connector (female)	Plug connector (male)
10	 <p data-bbox="694 1288 837 1310">SWF593757</p>	

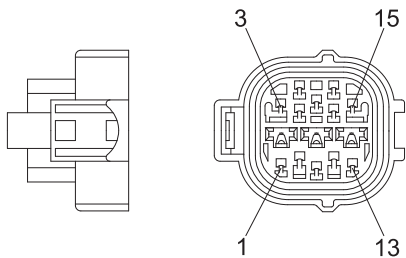
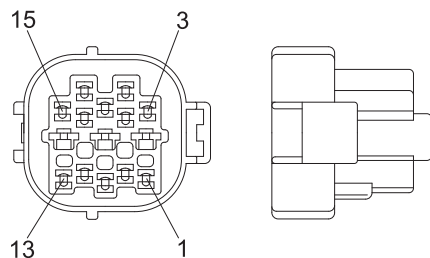
17) MWP NMWP CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p data-bbox="686 1892 837 1915">NMWP01F-B</p>	

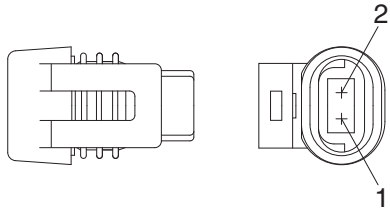
18) ECONOSEAL J TYPE CONNECTORS

No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p style="text-align: center;">S816-001002</p>	 <p style="text-align: center;">S816-101002</p>
2	 <p style="text-align: center;">S816-002002</p>	 <p style="text-align: center;">S816-102002</p>
3	 <p style="text-align: center;">S816-003002</p>	 <p style="text-align: center;">S816-103002</p>
4	 <p style="text-align: center;">S816-004002</p>	 <p style="text-align: center;">S816-104002</p>

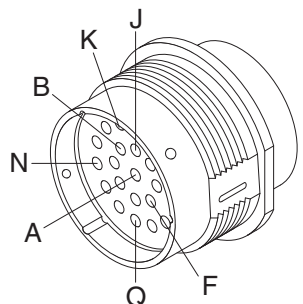
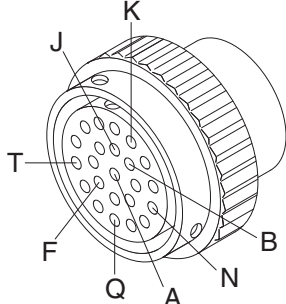
No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p style="text-align: center;">S816-006002</p>	 <p style="text-align: center;">S816-106002</p>
8	 <p style="text-align: center;">S816-008002</p>	 <p style="text-align: center;">S816-108002</p>
10	 <p style="text-align: center;">S816-010002</p>	 <p style="text-align: center;">S816-110002</p>
12	 <p style="text-align: center;">S816-012002</p>	 <p style="text-align: center;">S816-112002</p>

No. of pin	Receptacle connector (female)	Plug connector (male)
15	 <p style="text-align: center;">368301-1</p>	 <p style="text-align: center;">2-85262-1</p>

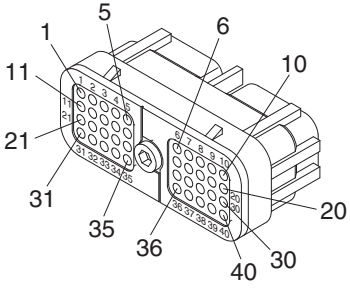
19) METRI-PACK TYPE CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: center;">12040753</p>	

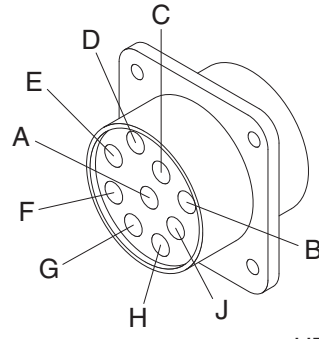
20) DEUTSCH HD30 CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
23	 <p style="text-align: center;">HD36-24-23SN</p>	 <p style="text-align: center;">HD34-24-23PN</p>

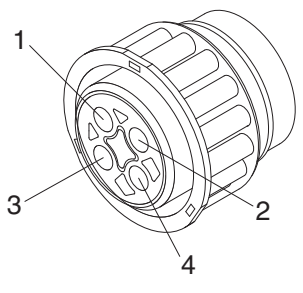
21) DEUTSCH MCU CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
40	 <p style="text-align: right;">DRC26-40SA/B</p>	

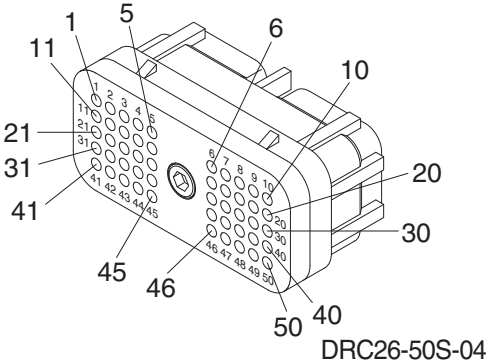
22) DEUTSCH SERVICE TOOL CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
9	 <p style="text-align: right;">HD10-9-96P</p>	

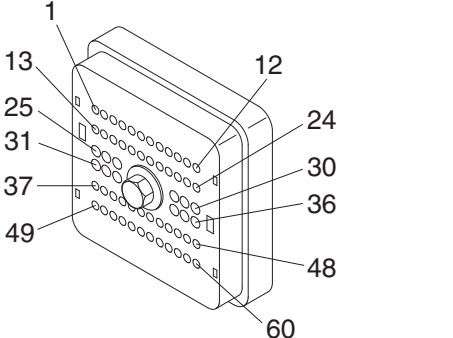
23) AMP FUEL WARMER CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
4	 <p style="text-align: right;">2-967325-3</p>	

24) DEUTSCH ENGINE ECM CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
50	 <p style="text-align: right;">DRC26-50S-04</p>	

25) DEUTSCH INTERMEDIATE CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
60	 <p style="text-align: right;">DRB16-60SAE-L018</p>	